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**INFORMATION NEEDS OF ALBERTA  
FARMERS AND FARM FAMILIES:**

**PROVINCIAL RESULTS**

**Alberta**  
AGRICULTURE





## EXECUTIVE SUMMARY

### INTRODUCTION

Early in 1983, the Planning Secretariat, Alberta Agriculture undertook an inquiry into the information needs of Alberta farmers and farm families. This was in response to the objective of the reorganized Field Services Sector to improve the information and consultative services to farmers and their families and to ensure capability for delivering same. To obtain this data, a contract to conduct a provincial survey was entered into with the Heffring Research Group of Calgary.

The objective of the study was to provide Alberta Agriculture data on the information needs of its clientele. The general areas of investigation focused on information farmers and farm families need to make day to day decisions on the farm, sources of information for primary producers and level of satisfaction with these, preferred methods of information delivery, and the kinds of information and services that are available from Alberta Agriculture but are not needed and vice versa. A profile of farmers across the province and by region including information on production mix, type of farm business, and a variety of demographic and lifestyle characteristics was prepared.

The survey target population was all commercial farms in Alberta; a commercial farm being defined as a producing farm with annual sales of agricultural products of at least \$2500 or more. There were 2312 telephone interviews completed of farm operators or female heads of household (30% quota) and the results were weighted to accurately reflect each of Alberta Agriculture's six regions.

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## KEY FINDINGS

### A. INFORMATION NEEDS OF ALBERTA FARMERS AND FARM FAMILIES

The information areas rated in order of most importance to the operation of a farm were: selection and use of agricultural chemicals, business management, crop production technology, home management and family relationships; followed by daily market information, market forecasts, government policies, and livestock production technology.

54.1% of respondents were unable to identify other types of information important to the day-to-day decisions on the farm and 33.0% mentioned weather forecasts.

The major issues identified as being important to farmers in the next five years are: Crop Rate, crop prices, marketing, cost/price squeeze and production costs.

Characteristics of a useful farming information source should be: reliable/accurate, based on experience, easy to understand, local/applicable to the area, and easy to obtain/ease of access.

### B. SOURCES OF INFORMATION AND LEVEL OF SATISFACTION

Those information sources rated as most useful by respondents were:

1. Neighbors and friends
2. Radio
3. Alberta Department of Agriculture
4. Farm magazines and newspapers
5. District Agriculturist

Radio was identified as the best source of daily market information and market forecasts. Respondents rely on farm magazines and newspapers for information on livestock production technology. Farm





magazines, newspapers and District Agriculturists were given as the best sources for crop production technology information. For information on the selection and use of agricultural chemicals, respondents look to elevator agents, suppliers/dealers and District Agriculturists. Personal experience and bankers were the best source of business management information. The best sources of information on government policies were newspaper and radio. Respondents rely primarily on personal experience for information on home management and family relationships. Females are more likely than males to identify the District Home Economist as a source of information on home management and family relationships.

Information provided by Alberta Agriculture was perceived as easy to obtain, current/up-to-date, reliable/accurate, and easy to understand. Characteristics of being based on experience, being concise, being local/applicable to the area, and being practical and easy to apply were rated somewhat lower.

#### C. PREFERRED METHODS OF INFORMATION DELIVERY

Alberta farmers require practical information which is easy to obtain, timely and does not require an excessive amount of time to absorb.

Farmers would like Alberta Agriculture to provide information through the following sources:

1. Newspaper articles
2. Telephone contact with District Agriculturist
3. Radio programs
4. Office consultations with District Agriculturist
5. Newsletters
6. Bulletins or pamphlets
7. Demonstrations





D. ALBERTA AGRICULTURE INFORMATION SERVICES

A. Awareness and Contact

98.5% of respondents are aware of the Alberta Department of Agriculture.

In the past year, three-quarters of respondents have contacted someone from the district office of Alberta Agriculture. 92.0% of these respondents contacted the District Agriculturist. 18.9% of respondents contacted someone from the regional office and 7.6% contacted the Provincial Headquarters Offices of Alberta Agriculture in the past year.

20.1% of respondents have not contacted anyone from Alberta Agriculture in the past year. The majority of these respondents perceive Alberta Agriculture as problem solvers and have not felt a need to contact the Department.

B. District Office

Of those respondents who have contacted the District Agriculturist in the past year, 92.7% did not experience any problems in contacting the District Agriculturist by telephone. 90.2% of the respondents do not have any problems contacting the District Agriculturist in person, and 9.3% mentioned that the District Agriculturist was not in the office. 11.2% of respondents think that the district office should be open weekends and 11.1% would like the district office to be open in the evenings.





### C. Image and Satisfaction

85.2% of respondents were satisfied with the information currently offered by Alberta Agriculture and 97.8% of respondents were unable to indicate how Alberta Agriculture could better serve them. 5.1% would like more field visits.

Satisfaction with services offered by Alberta Agriculture does not vary significantly by age, number of cultivated acres owned, or the education of the respondents except for one variable where respondents having recent contact with the Department were significantly more likely to be satisfied. 32.2% of respondents were unable to rate their satisfaction with farm visits, suggesting that perhaps they had not been exposed to this service.

It would be useful to 61.4% of the respondents if Alberta Agriculture had computers to access farming information. 73.7% of these respondents recommended that computer terminals be located in the district office. Those respondents who currently own a computer or intend to purchase a computer in the next five years think it would be useful if Alberta Agriculture had computer access to farming information.

### E. 1983 PROFILE OF FARMERS

The profiles of Alberta farmers can be differentiated primarily based on the age of the farm operator. Although age is a continuum, two extremes are used to emphasize the differences. Respondents in the 35 to 54 age category represent a transitional group with some characteristics of both younger and older respondents.





FARMERS LESS THAN 35

- Have farmed for ten years or less
- High school or  
post secondary education
- More likely to work off-farm
- More likely to have gross farm  
sales of \$100,000 or over
- Most likely to have a family  
partnership/corporation business  
arrangement.
- Most likely to rate Alberta  
Agriculture computer access of  
farming information as a useful  
concept.

FARMERS AGE 55 AND OVER

- Have farmed for more than 30 years
- Less than high school education
- Least likely to work off-farm
- Least likely to have gross farm  
sales of \$100,000 or over
- Predominantly single ownership  
business arrangement.
- Least likely to purchase a  
computer

The above suggests that as younger farmers and those with large farming operations turn to other types of business arrangements, they become more sophisticated in their use of farming information. These trends have implications for the information sources utilized by Alberta farmers.

The foregoing summarizes the report based on an initial breakdown of the survey data. The potential exists for further extensive analysis and interpretation of these disciplined results; thereby providing additional program direction for Alberta Agriculture.



MONA M. COX, MEMBER  
PLANNING SECRETARIAT



W. RANDALL MEEKS, MEMBER  
PLANNING SECRETARIAT

December, 1983









INFORMATION NEEDS OF ALBERTA  
FARMERS AND FARM FAMILIES  
DOCUMENT 1

PRESENTED TO: MONA M. COX AND RANDALL W. MEEKS, MEMBERS  
PLANNING SECRETARIAT  
ALBERTA AGRICULTURE  
EDMONTON, ALBERTA

PRESENTED BY: HEFFRING RESEARCH GROUP LTD.  
UNDER CONTRACT TO ALBERTA AGRICULTURE

NOVEMBER 30, 1983





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### Research Documents

Any questions concerning the final report of "Information Needs of Alberta Farmers and Farm Families" should be directed to:

Mona Cox, Member  
Planning Secretariat  
Alberta Agriculture  
Edmonton, Alberta

As a result of the research investigation, two documents were produced:

#### Document One: Information Needs of Alberta Farmers and Farm Families

This is the main document which provides an introduction to the research project and an analysis of the survey results on a provincial basis. The provincial analysis is based on the aggregated data collected from the six regions of Alberta Agriculture. The main document is comprised of the following characteristics:

- .Introduction and Background
- .Purpose of the Research
- .The Research Investigation
- .Key Evaluation Areas - Summary of Findings
- .Literature Search
- .Survey Results
- .Sampling Procedure
- .Provincial Data

#### Document Two: Regional Results

Document two provides data breakdowns for each of the six regions of Alberta Agriculture. The results obtained for each region are presented separately and supported by regional frequencies. In addition, a summary is included which compares the similarities and differences between regions.



SECTION I

## Introduction and Background

### Alberta Farms

A census farm is defined as a farm, ranch or other agricultural holding with sales of agricultural products during 1980 of \$250 or more. In 1981, there were a total of 318,361 census farms in Canada. Alberta had 18.2% (58,056) of Canada's census farms. The total area in farms in Alberta as of June 1981 was 50,184,000 acres. This represents approximately 30% of the total farm area in Canada. 31% of Alberta's land area is devoted to agriculture. The average farm size in Alberta is 813 acres. One-third of all the jobs in the province relate directly or indirectly to the agricultural industry.

44.2% of Alberta's farm area represents acreage under crops. Canadian Wheat Board grains (wheat, oats, and barley) account for 68.4% of Alberta's acreage under crop and tame hay represents 17.7% of total farm area under crops. Alberta is responsible for the production of 50% of Canada's barley and 42% of its rapeseed. Alberta's livestock represents 7.8% of Canada's dairy cattle, 35.5% of its beef cattle, 13.6% of Canada's hogs, and 23.6% of its sheep.

Prior to the 1981 census, Statistics Canada attached the term "commercial" to any farm with sales of agricultural products of \$2500 or more in a 12 month period. Alberta accounts for 18.8% of commercial farms in Canada and 20.9% of 1981 farm cash income. 11.9% of Alberta farms have sales of agricultural products of \$2500 or less and are labelled "marginal operations". 88.1% of Alberta farms are commercial operations. The breakdown of commercial farms by regions of Alberta Agriculture are provided in Chart 1.

<u>1981 Census of Agriculture for Alberta</u>		<u>Chart 1</u>	
6 Regions of Alberta Agriculture	# of Farms	Commercial Farms (Sales Over \$2500)	%
Southern Region - Lethbridge	8,153	8,093	95.1%
South Central Region - Calgary	7,952	7,227	90.9%
North Central Region - Red Deer	11,455	10,409	90.9%
North East Region - Vermilion	9,999	8,860	88.6%
North West Region - Barrhead	11,898	9,623	80.9%
Peace River Region - Fairview	8,239	6,952	84.4%
Total	58,056	51,164	88.1%

### Alberta Agriculture

"Alberta Agriculture is responsible to the people of Alberta for the development and effective management of programs and resources to improve the incomes and well being of primary producers and those engaged in the processing and marketing of agricultural products and services".(1) The services offered by Alberta Agriculture are generally classified as:

1. Education
2. Resource Assistance
3. Research
4. Regulation

Alberta Agriculture attempts to fulfill its purpose in part by anticipating and meeting the information needs of Alberta farmers and farm families. Over the years a number of technological changes and social trends have impacted on the information needs of Alberta farmers and their families. The average value of farm capital has increased dramatically over the years in Alberta as has the average size of land holdings. With mechanization, a decline in need for family labor has occurred in conjunction with the decline in size of the rural family. In general, there has been a decline in the number of farm operators in Alberta and the total farm population. In addition, there has been a trend to more off-farm work by farm operators. (1981 Census of Agricultural Data and Agritel, the Direct Mail Division of Public Press). Each of these trends has had an impact on the information needs of Alberta farmers and farm families.

(1) Alberta Agriculture - Unpublished Document, 1983



## B. Purpose of the Research

The overall purpose of the study was:

To provide data to Alberta Agriculture on the information needs of Alberta farmers and farm families.

## C. Key Evaluation Areas

Based on the purpose of the research, the following questions were identified as representing key evaluation areas:

1. What information do farmers and farm families need to make decisions relevant to maintaining viable family farms in Alberta?  
In what decision areas do farmers and farm families most require information?
2. From what sources do farmers and farm families currently obtain information relevant to agribusiness and maintaining viable family farms? How satisfied are farmers and farm families with the information sources available to them? What are the characteristics of a useful information source? Are there areas of information and services needed by farm families which are not currently available to or accessible by farmers and farm families?
3. What are the preferred methods of obtaining information pertaining to the decision areas of farmers and farm families?
4. Is Alberta Agriculture perceived as a valid and useful source of

information by farmers and farm families? How satisfied are farmers and farm families with the information and services provided by Alberta Agriculture? Are there areas of information and services currently available from Alberta Agriculture which are not needed by farmers and farm families?

5. What are the profiles of Alberta farmers and farm families?

What are the demographic characteristics of farmers (length of time farming, sources of income, cultivated acres, location of residence, type of business arrangement, education, off-farm employment, age, and income)? How do users of Alberta Agriculture services differ from non-users? To what extent are farmers and farm families involved in agricultural organizations?

SECTION II

## A. The Research Investigation

A stepping stone research approach was used to answer the key evaluation questions. The research method used is descriptive in nature and provides a "snapshot" of the situation at a given point in time. The research process and its rationale are outlined below.

### 1. Literature Search

The literature search provides a review of relevant research conducted in the area of information needs of farmers and farm families. The literature search was conducted through a computer library search of material available in North America. In addition, government documentation provided by Alberta Agriculture was reviewed. The literature search was not intended to be exhaustive, but to outline the key highlights of similar research and identify gaps in the existing research. The literature search provided direction for the focus group discussions and aided in the development of the telephone questionnaire.

### 2. Focus Groups

The diagnostic group discussion, more commonly known as the focus group discussion, is a qualitative research technique primarily designed to develop attitudes, hypotheses, and consumer language concerning a particular target market. In this case, the target market was defined as rural farm families and included all persons resident on producing farms in the six regions of Alberta Agriculture. A producing farm was defined as a farm with annual sales from agricultural products of \$2500



or more. The unit of analysis was defined as farm families as represented by the male or female head of household. An adequate measure of a family unit can be obtained by surveying one member of the household where the information sought pertains to the family as a unit.

Each focus group involved between 8 and 10 respondents who were gathered together in an informal and semi-structured environment to discuss the subject area. Each session lasted one and a half to two hours and was directed by a trained moderator from The Heffring Research Group. In addition to discussion of the subject area, respondents were presented with a list of information sources and requested to indicate which information sources they utilize on a regular basis.

The strength of the focus group lies in the fact that no matter how thoroughly a question is asked or how thoroughly a response is probed in one-to-one interviewing situations, it is possible that some important beliefs and attitudes may not come to mind. However, in group discussions respondents are free to respond to each other's comments. One respondent may say, "I would not have thought of that". It is this type of group interplay that produces the particular depth of beliefs and attitudes.

This technique also allows the flexibility to survey various geographic markets, individual market segments, etc. Thus, by conducting a series of group discussions in rural areas in Alberta, an in-depth view of a cross section of Alberta farm families was obtained. Two focus groups were conducted in each of the six regions of Alberta Agriculture, for a total of twelve groups.

It should be stressed that the focus group results are not statistically representative of all rural Alberta farmers and farm families. Rather, the results provide a broad view of the diversity of opinions and attitudes with regard to the subject area. Overall, the objectives of the focus groups were to provide insight and direction for the telephone survey and to identify primary information sources utilized by farm families. The results from the focus groups were used to develop the questionnaire for the telephone survey.

### 3. Telephone Survey

Based on the literature search and focus group results a quantitative questionnaire was designed. The questionnaire was approved by Alberta Agriculture on July 27, 1983. The questionnaire was pre-tested under field conditions to identify potential language and format problems.

A quota of 70% male and 30% female heads of household was recommended by Heffring Research Group Ltd. to provide an adequate sample of females to allow for analysis. The main focus of the survey was to identify the information needs of farmers as they relate to the operation of a viable farm. In Alberta the majority of farmers are males. Telephone interviews were conducted by trained interviewers in Calgary and Edmonton. 10% of the interviewing and coding were verified and 100% of keypunching was verified.

The sample used in the telephone survey was intended to be representative of the provincial and regional farm population of Alberta. A total of 2325 interviews were completed between July 29 and September 6, 1983. Of the 2325 questionnaires completed, 13 did not indicate the region or location of the respondent. As a result, these 13 questionnaires are

included in the provincial analysis, but are excluded from the regional analysis. With a sample size of 310 or more per region, the regional results are accurate to within  $\pm 5\%$  at the 95% confidence level. A sample size of 2325 provides provincial results which are accurate to within  $\pm 2\%$  at the 95% confidence interval. That is, if an observed percentage result is 50%, the chances are 95 in 100 that a range of  $\pm 2\%$  (48% to 52%) includes the true percentage in the entire population.

Chart 2 provides a breakdown of interviews completed by sex of respondent and region:

Chart 2

Region	Male	Female	Total
Southern	255	100	355
South Central	266	117	383
North Central	297	122	419
North East	270	115	385
North West	270	115	385
Peace	269	116	385
Total	<u>1627</u>	<u>685</u>	<u>2312</u>
No Location Given			13
Total Interviews Completed			2325

For a detailed analysis of the sample, please refer to Appendix B, Sampling Procedure.

### SECTION III

#### KEY EVALUATION AREAS - SUMMARY OF FINDINGS



1. What INFORMATION do farmers and farm families need to make decisions relevant to maintaining viable family farms in Alberta?

The most important information needs as identified by Alberta farmers are: information on the Selection and use of agricultural chemicals, Crop production technology, Business management information, and information on Home management and family relationships. (Chart 3) Those issues which most concern Alberta farmers revolve around the efficiency and profitability of their enterprise and include the Crop Rate, Crop prices, Marketing, the Cost/Price Squeeze, and production costs.

Chart 3

Importance of Information	Very Important	N=2325			Not at all Important
	1	2	3	4	5
Daily market information	28.9%	24.1%	26.8%	10.7%	9.1%
Market forecasts	23.7	30.7	25.8	10.5	9.0
Livestock production technology	21.1	24.6	20.0	10.2	23.4
Crop production technology	33.1	34.6	18.5	7.0	6.1
Selection and use of Agricultural chemicals	42.0	28.6	13.1	6.9	8.9
Business management	37.5	28.8	21.2	7.4	4.7
Home management and family relationships	38.1	24.6	20.8	8.7	7.3
Government policies	19.7	23.1	28.2	12.9	15.3

2. From what SOURCES do farmers and farm families currently obtain information relevant to agribusiness and maintaining viable family farms? How satisfied are farmers and farm families with the information sources available to them?

The best source of daily market information and market forecasts is radio. Alberta farmers rely on farm magazines and newspapers for livestock production technology information. For crop production technology information, farmers look to farm magazines and newspapers, and District Agriculturists. Elevator agents, suppliers and dealers, and District Agriculturists are perceived as sources for information on the selection and use of agricultural chemicals. The majority of farmers rely on personal experience and bankers for business management information. The best sources of information on government policy are newspapers and radio. Personal experience is relied on for information on home management and family relationships.(Chart 4)

Chart 4

Information Need	Best Sources of Information N=2325	
Daily market information	Radio	75.1%
Market Forecasts	Radio	44.6%
Livestock Production Technology	Farm Magazines	22.7%
	Newspapers	13.5%
Crop Production Technology	Farm Magazines	21.6%
	Newspapers	16.4%
	District Agriculturist	16.7%
Selection and Use of Agricultural Chemicals	Elevator Agents	19.1%
	Suppliers/Dealers	18.3%
	District Agriculturist	15.2%
Business Management Information	Bankers	17.1%
	Personal Experience	16.3%
Government Policy	Newspapers	22.0%
	Radio	14.8%
Home Management and Family Relationships	Personal Experience	20.9%

Farmers who have been farming for more than thirty years rely more on traditional sources of farming information than do less experienced farmers. Long-term farmers rely more on elevator agents for agricultural chemical information and personal experience for business management information. Farmers who have been farming for more than thirty years rely more on personal experience and less on farm magazines and newspapers for livestock and crop production technology.

Those information sources which are considered to be most useful by all Alberta farmers are: Neighbors and friends, Radio, Alberta Agriculture, Farm magazines and newspapers, and District Agriculturists.

What are the characteristics of a USEFUL INFORMATION SOURCE?

The literature and survey findings indicate there are specific guidelines that should be adhered to in preparation of information relevant to farm operators. In order to be useful, information must be reliable, based on experience, easy to understand, local and applicable to the area, and easy to obtain/accessible. These characteristics apply to any farm related information, whether it is general farming articles, production and technical specific information, or market projections.

3. What are the preferred methods of OBTAINING INFORMATION?

Alberta farmers require practical information which is easy to obtain, timely, and does not require an excessive amount of time to absorb. Farmers would like Alberta Agriculture to provide information to them through the following sources:

1. Newspaper articles
2. Telephone contact with DA
3. Radio programs
4. Office consultations with DA
5. Newsletters
6. Bulletins or pamphlets
7. Demonstrations

In order to be useful, each of these methods of communication must comply with the characteristics identified for useful information sources.

4. Is ALBERTA AGRICULTURE perceived as a valid and useful source of information by farmers and farm families?

Information provided by Alberta Agriculture is perceived as easy to obtain, current/up-to-date, reliable, and easy to understand. In comparison to the characteristics defined as necessary for useful farming information, Alberta Agriculture information is not perceived by farmers as being based on experience, easy to understand, or local and applicable to the area. (Chart 5)



Chart 5  
Average Score Comparison of Ideal Information Characteristics  
and Alberta Agriculture Information

	Characteristics of Useful Information (Ideal)	Characteristics of Alberta Agriculture Information
Current/Up-to-Date	1.6	1.9
Reliable/Accurate	1.5	2.0
Unbiased	1.9	2.2
Based on Experience	1.5	2.3
Practical/Easy to apply	1.6	2.2
Easy to Understand	1.5	2.0
Concise/Brief	1.8	2.2
Local/Applicable to my Area	1.5	2.2
Easy to obtain/Ease of access	1.5	1.8

Legend: A scale of 1 to 5 was used with 1 representing a characteristic which is very important and 5 representing a characteristic which is not at all important.

98.5% of Alberta farmers are aware of Alberta Agriculture and for the majority of these farmers, Alberta Agriculture is synonymous with farming information and the District Agriculturist. Those respondents who associate the District Agriculturist with Alberta Agriculture tend to have the following characteristics: Younger, own 760 or more acres of cultivated land, have recently contacted Alberta Agriculture, and have gross farm sales of \$100,000 or more. Farmers who associate farming information with Alberta Agriculture tend to be older, are least likely to have initiated contact with Alberta Agriculture, have gross farm sales of less than \$25,000, and have less than a high school education.

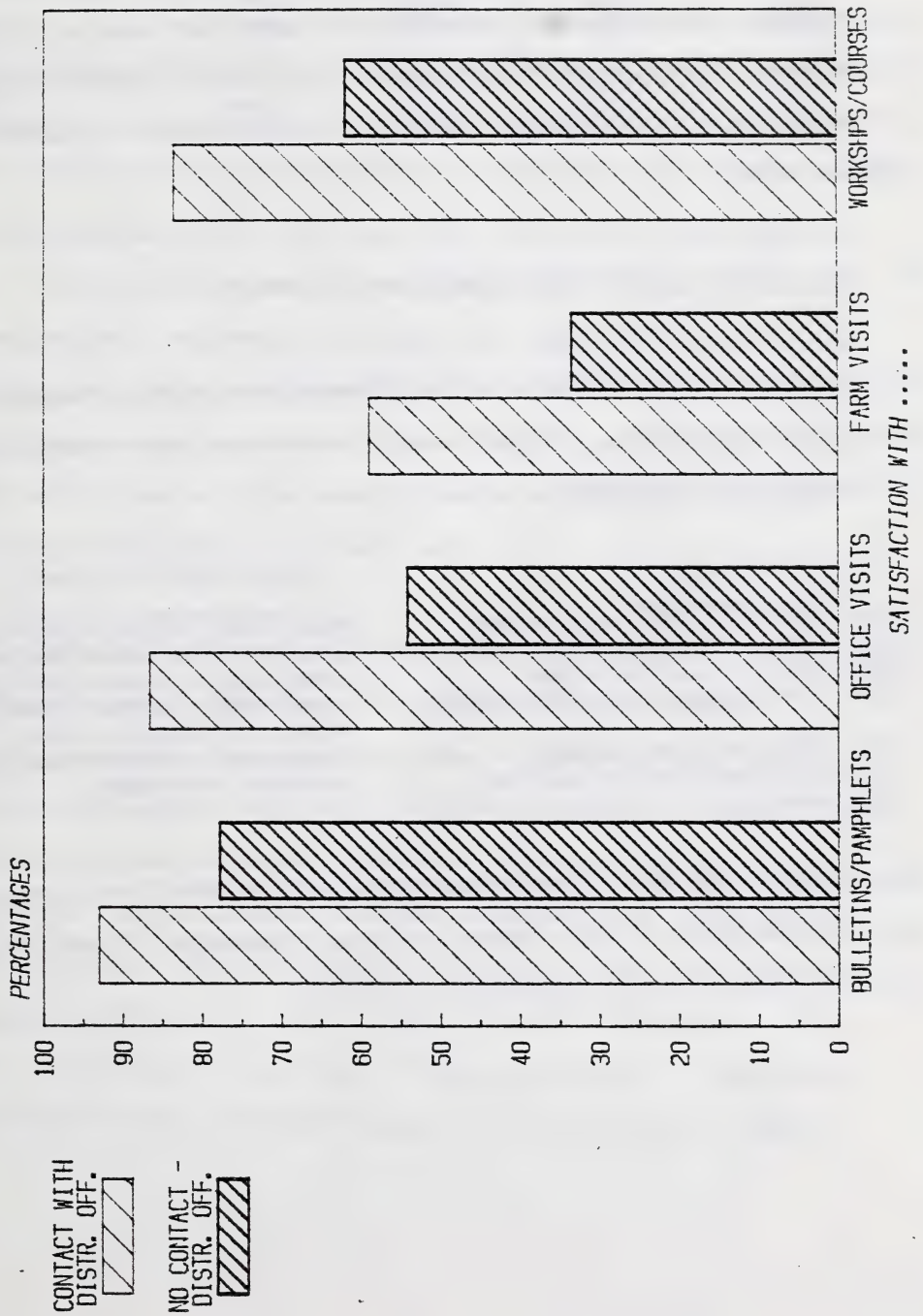


20.1% of respondents who are aware of Alberta Agriculture have not contacted anyone from the Department in the past year. The majority of these respondents perceive Alberta Agriculture strictly as problem solvers in that they would only contact the Department if they had a specific problem which they were unable to solve based on their extensive experience. These respondents have not recently felt a need to contact the Department. These farmers have been farming for long periods of time and tend to rely on personal experience. In general, larger operators have more contact with all Agriculture representatives. In addition, the literature supports a positive link between educational level, exposure to extension services, and farm productivity.

How SATISFIED are farmers and farm families with the information and services provided by Alberta Agriculture? Are there areas of information and services currently available from Alberta Agriculture which are not needed by farmers and farm families?

85.2% of respondents are satisfied with the information and services currently offered by Alberta Agriculture and 97.8% do not feel that the Department is providing unnecessary services. Contact with Alberta Agriculture is associated with satisfaction with services offered. (Graph A) Respondents who have contacted the district or regional offices of Alberta Agriculture are significantly more likely to be satisfied with bulletins and pamphlets offered, office consultations, farm visits, and courses and workshops offered. In each case, respondents who have not initiated any contact with the Department are least able to rate their satisfaction with the services offered.

GRAPH A  
DISTRICT OFFICE CONTACT



It would be useful to 61.4% of farmers if Alberta Agriculture had computers to access farming information. Younger respondents, those with high school or post-secondary education, and respondents with gross farm sales of \$100,000 or more are most likely to rate Alberta Agriculture computer access to farming information as a useful concept. Computer terminals should be located in the district office.

##### 5. What are the current PROFILES of Alberta Farmers?

The profiles of Alberta farmers can be differentiated primarily based on the age of the farm operator. Although age is a continuum, two extremes are used to emphasize the differences.

###### Farmers age 15-34

- Have farmed for ten years or less
- High school or post-secondary education
- More likely to work off-farm
- Gross farm sales of \$25,000 or more
- Most likely to have a family partnership/corporation business arrangement.

###### Farmers age 55 and over

- Have farmed for more than 30 years
- Less than high school education
- Least likely to work off-farm
- Least likely to have gross farm sales of \$100,000 or over
- Predominantly single ownership business arrangement.

Respondents in the 35 to 54 age category represent a transitional group with some characteristics of both younger and older respondents. Education is inversely related to age as indicated in Chart 6.

Chart 6

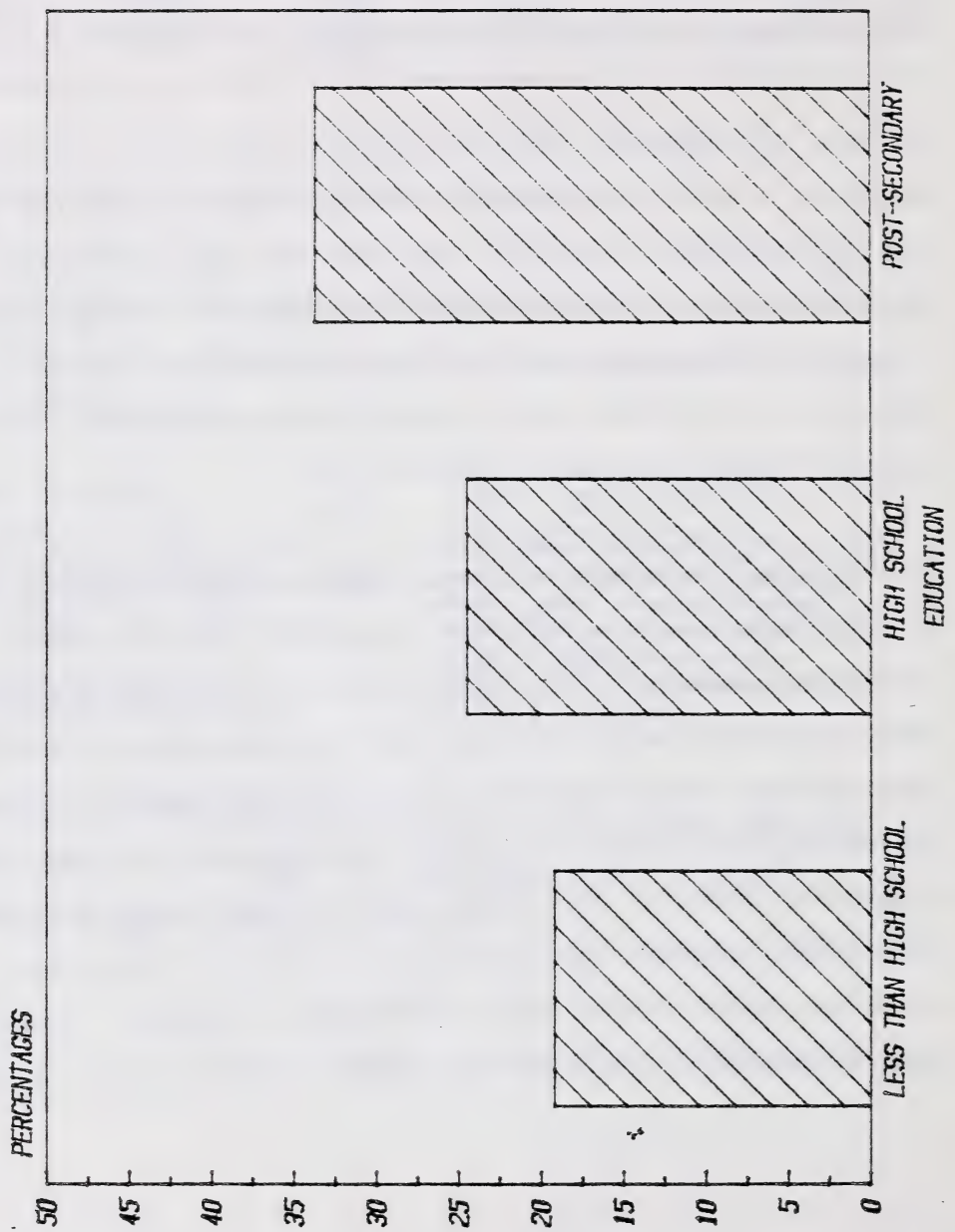
Education	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Less than high school	17.1%	34.1%	58.2%	*65.8%
High school	*44.6	33.4	21.7	18.3
Post-secondary	*37.7	32.1	19.6	13.7

The older the respondents, the less likely they are to have a post-secondary education. A similar relationship exists between age and gross farm sales, with the percentage of respondents with gross farm sales of \$100,000 or more declining with age. Off-farm employment also decreases with age. Respondents in the 35 to 54 age category are most likely to have farmed for ten to thirty years, they tend to have a single ownership business arrangement, and have contacted Alberta Agriculture in the past year.

Gross farm sales of \$100,000 or more are associated with respondents who have a post-secondary education.(Graph B) In addition, there is a direct relationship between gross farm sales and acres of cultivated land owned. These relationships suggest that there is a trend developing as farmers become better educated and more successful in terms of farm productivity. Farmers who operate under a single ownership business arrangement are least likely to purchase a computer. This suggests that as younger farmers and those with large farming operations turn to other types of business arrangements, they become more sophisticated in their use of farming information. These trends have implications for the information sources utilized by Alberta farmers.



GRAPH B  
GROSS FARM SALES - \$100,000+





SECTION IV  
LITERATURE SEARCH

## LITERATURE SUMMARY

In order to examine the principal communication channels used by farmers, farmers perceptions of available information, and socioeconomic factors affecting information utilization, research studies were reviewed that focussed primarily on the areas of: values, goals, adoption of innovations, decision making, education, extension services, and computer usage in agriculture.

Approximately 150 Canadian and United States studies were reviewed through a search of 2 data bases (Agricola and CAB) for the years 1977 to 1983. This summary outlines the results and implications of only those research reports considered to be most relevant to the research objectives of The Study of Information Needs of Alberta Farmers and Farm Families. Significant literature or articles reviewed but not cited in the text of the summary may be found in the bibliography. (Appendix A)

### Goals/Success Standards/Values:

During the past 70 years, major changes in agriculture have produced changes in every aspect of farming, except the values to which people subscribe. Individualism is still a dominant value although it increasingly comes into conflict due to government aid programs and subsidies. (DeSart, 1980)

The benefits of farming are viewed as both economic and noneconomic and the way in which the farmer views these benefits may affect the management of his operation. A study of 111 farmers asked to rank, in order of preference and relative weight, 10 personal and economically related goals resulted in the following:

1. stay in business
2. stabilize income
3. increase efficiency on existing acreage
4. provide a college education for children
5. improve living standards
6. reduce borrowing
7. make highest profit
8. increase time off
9. increase net worth
10. increase farm size . (Smith and Capstick, 1976)

Another study of successful farm managers or operators, provided the following factors as considerably important in contributing to the success of their operation: good management, flexibility, responsiveness to changing conditions, willingness to make changes, timeliness of decision making and action, perseverance, efficiency, competitiveness, luck, higher education, financial management, and farm family. (Development Centre, TVA, 1981)

#### Education and Training:

Several studies in education and training have been undertaken to determine the effects of education (formal as well as short courses or home study courses), in increasing productivity and efficiency on the farm.

A report, summarizing the results of a number of studies of the effect of a farmer's educational level and exposure to extension services on his productivity, concludes that farm productivity increases, on average, by 7.4% as a result of a farmer completing four additional years of elementary education

rather than none. The effects of education are much more likely to be positive in modernizing the traditional environments. (Lockheed, Jamieson, Lau, 1980)

Participants of home study courses, developed by the Plant Industry Division of Alberta Agriculture in conjunction with the Faculty of Extension of the University of Alberta, were surveyed to determine the results of these courses. Results indicate that two major objectives of people running agricultural extension are being served:

1. to assist as many farmers as possible at minimum cost, and
2. to have farmers actually implement the recommended practices. (Lamble, 1978)

Through the use of television, Extension agents in Northwest Ohio have been able to attract a sizeable viewing audience, including many people who had never attended an Extension meeting. Thirteen half hour programmes were prepared, each consisting of an introduction by the host, a grain market analysis by the state grain marketing specialist, a main topic, and a summary. The programmes encouraged viewers to seek additional information from the county agent and featured two agents each week. A survey conducted to determine audience and impact estimated approximately 10,000 viewers and over half of the viewers indicated farm practice changes due to programme viewing. (Kroetz, Cole, 1978)

#### Information Resources/Diffusion of Information

The ever expanding body of agricultural knowledge creates problems in communications and accessing information. Extensive quantities and types of

information are available and distributed to the farmer. As stated by John Calpas (1977, pg. 7) "Farm families will not accept advice if it is not physically feasible, economically sound and socially acceptable." The high variability in perceived acceptance and use of information precludes clear-cut recommendations on how farmers can most effectively use this information.

According to some U.S. studies, the large commercial family farmer perceives that the most important kind of information they need, in decreasing order of importance, are:

1. marketing and production technology
2. weather
3. business management

Sources of information considered most important varied by kind of information. For example, extension services and universities are considered an important resource for production technology information, but of little or no value for marketing information. Farm magazines are consistently cited as an important and credible source for all kinds of information. On that basis, it is suggested that extension staff should maintain effective contact and communications with farm magazines because of the teaching potential of this medium.

"Extension may be defined as the process by which new attitudes, knowledge and production skills are transferred from researchers, agri-business and progressive farmers to the great majority of farm families". (Alberta Agriculture Extension Division Program Objectives, Aug. 1982) Extension in many



provinces has gradually decreased attention to production technology and increased focus on business management which ranks considerably lower in the perceptions of farmers. (Blackburn, 1982)

Several studies have found extension agencies and magazines to be the most helpful, in terms of information usage, and trustworthy information sources. Information conveyed in farm magazines represents a vital ingredient in agricultural decision making, which accounts for the continual growth and increasing specialization of farm magazines. (Brunn and Raitz, 1978) While Blackburn (1983) indicates that there is no single best source of information, he also states (1982) that farm magazines are rated by farmers as the best information source and provide an important information dissemination vehicle.

Interpersonal networks are found to be influential in the dissemination of information and adoption of new farm practices. While farmers showed a slightly greater reliance on commercial agents, such as salesmen, for information, if they were faced with conflicting reports, they would overwhelmingly choose an extension agent's advice due to the presumed bias of the commercial agent. Farmers considered the extension bulletin as a successful means of disseminating information.

(Awa, Van Crowder, 1978)

Through a series of interviews to determine the decision process in purchasing, the following model of stages in the decision was identified:

Stage 1 - problem recognition

Stage 2 - search for information

Stage 3 - evaluation of alternatives

Stage 4 - decision and evaluation

In-depth interviews were conducted to determine the market implications of these stages of the decision model. Younger farmers were considered the best target group for marketing programmes as they are more likely to change to alternative brands, and become loyal customers in the future. (Funk, Tarte, 1976)

Risk and the decision maker's attitude toward risk play a role in individual decision making. (Brink, 1977) Rates of adoption are found to depend on several variables, including education of the decision maker, farm system aspirations, farm size, diversity, age and tenure, social participation, and communication with extension agent.

#### Adoption of Innovations

The importance of flexibility, responsiveness to changing conditions, willingness to make changes, and timeliness of decision making and action in contributing to the productivity and efficiency of farm operations have been documented in studies of successful farm operators. In light of this, several studies have been undertaken to assess the factors involved in the decision making and action aspects of adopting a farm innovation.

The advantages of adopting an innovation are viewed, by the potential adopter, as limited because new innovations generally possess some or all of the following characteristics:

1. high initial costs
2. low economic profitability
3. high perceived risk
4. increases in discomfort
5. low immediacy of rewards, and
6. often require more time and effort for implementation than current practices. (Nowak and Korsching, 1982)

A study of the impact of risk attitude on the adoption of an innovation points out that earlier adopters are actually risk-adverse but have acquired greater knowledge and skills, from which they have learned to achieve success by adopting new practices that reduce the risks involved in farming.  
(Mason and Halter, 1982)

Larger farm operators are generally earlier in adopting new innovations either because of their greater ability to absorb risk or because they have better information and perceive less risk in adopting. As small farmers begin to acquire information about the innovation, they will consider adopting if there are no constraints to discourage adoption of the innovation. Constraints may include communication (information seeking behaviour, perceived credibility, information availability), innovation attributes (observability, compatibility, profitability, reliability, trialability), and economic constraints (crop variety, disease problems, farm size, tenancy, labour availability, education, capital availability). (Byrnes, 1982) This contention is exemplified in a study of 180 Maine dairy farms. The results of this study indicate that most innovative farmers, as measured by number of new techniques adopted and speed of adoption, are generally those with larger herds, more debt per cow, less tillable acreage per cow, fewer man-

hours of labour per cow, and more contact with extension workers.

(Willems, 1980)

Farmers are more likely to think demonstration farm practices practical for their own farms if: they were personal friends of the demonstration farmers, or, they had visited the demonstration farm. (Cunningham, Simeral, 1977) The results of this study imply support for the contention that there are inherent contradictions in a communication approach which is based upon eliciting intuitive verification of experimental results, in other words seeing is believing. Eliciting intuitive verification of experimental results is less likely to be effective in persuading farmers to adopt a new innovation than a method devised to use analytical tools to enable farmers to make their own decisions. The study further argues that farmers are in need of better analytical tools to enable them to make better decisions.

(Murtaugh, 1980)

### Extension Services

"The extension worker's prime objective is to introduce pioneer research information to farmers and through the extension process, motivate them to use this information to improve their operations. Through an educational process, the objective is to develop the client's capability to interpret, integrate and/or adopt scientific information, proven production practises and sound management techniques and strategies." (Alberta Agriculture)

A study undertaken to assess the viability of the cooperative extension services in the U.S. concludes that the future of extension depends on its ability to:



1. demonstrate its impact on its environment,
2. document its effectiveness, and
3. maintain a climate of political legitimacy.

(Christenson and Warner, 1982)

Some broad results from a few studies in the area of farm information communication are as follows:

- larger (farm) operators tended to have more contact with agricultural representatives than did small operators (Regan, 1968)
- audiences tended to value those media that are immediately available and useful to them. (Rogue, 1976)
- provincial extension and universities were rated the most important source for production technology, but of minor importance for market information. Radio and television were the two dominant sources for weather information. Suppliers were the major source of information for purchased farm supplies and consultants were the most important sources for business management. (National Extension Study Committee, U.S.A., 1977-78)
- extension services are focussed on large successful farms to the detriment of less affluent ones (Hightower, 1973) (Note: although this contention has been supported in several studies, there are reports that indicate the benefits of information received through extension services by smaller operators may be less tangible, but, useful and important.)
- farm magazines were the source most often used by farmers for obtaining farm information (Information Results Ltd., 1972; Napier et. al., 1980)



A number of studies have been undertaken, both in Canada and the United states, to determine the importance of extension services to the farm community and to verify whether extension serves the needs of all farmers or caters to the large commercial farmer. A Canadian study of the major differences between commercial farmers and limited resource farmers reports that commercial farmers are more highly educated, generally using more up-to-date farming technology, and were making intensive use of their capital resources and credits. The commercial group generally indicated high levels of social participation and expressed preferences for indirect forms of support for agriculture (ie. advisory services, credit facilities) over the more direct forms of support (ie. price subsidies.) The commercial group also displayed value orientations exemplifying a desire to maximize profits and a willingness to cooperate with others. Generally, commercial farmers are more likely to respond to programs. (Blackburn et, al., 1979)

Research and extension needs of limited resource farmers are different due mainly to:

- a) diversified production
- b) lower educational levels
- c) labour intensive enterprises
- d) varying markets
- e) non commercial motives sometimes conflict
- f) operating much more locally based

(Kentucky Agriculture Experiment Station, 1981)

Many extension agents believe that university based personnel could work

much more closely with extension personnel, thereby improving the productivity of the extension activities and increasing the relevance of the university in its service to the farm community. (Select Standing Committee on Agriculture - Phase II Research Report, 1979) It has been suggested that the major constraint in research and communication between universities, extension and farmers, lies in the lack of feedback from farmers to research, often resulting in inappropriate research programs. (Cummings, 1981)

#### Computers as Information Resources:

Computer based information services, from both the public and private sectors, are increasingly coming to bear on the massive information needs of agriculture. The magnitude of the computer's potential is tremendous. Innovations in this area are continually being developed. New applications are being devised, pilot tested, and implemented constantly.

AGNET, an interactive network designed to deliver management tools to individuals and groups concerned with agriculture, provides services in five major areas: problem solving, simulation, information, communications and computer associated instruction. Programs are "localized" to accommodate varying climatic, soil, etc., conditions throughout different user areas to better serve area specific needs. Information packages provide clients with access to: market data, economic analysis, news items, supplier sales, historical data and major events that may effect their operations. In 1981, AGNET served 2400 users in 36 states and foreign countries. User patterns indicate that "in the management decision process, current information and analysis of markets and trends, in addition to news items that may affect their operations, and the ability to communicate among other users, is as equally

important as the problem solving and simulation models." (Anatole, 1979)

Information supports decision making which leads to action that, when measured, produces additional data that can be processed to form new information to complete the information cycle. Farmers and ranchers in Texas have found the microcomputer a valuable tool in the decision making process to provide:

1. an effective tool for monitoring and evaluating the production, marketing, and financial activities of the farm or ranch.
2. an efficient means to store and retrieve relevant facts and data.
3. a facilitator of the use of computerized decision aids (McGrann, 1981)

Agricultural Extension has relied on printed bulletins, circulars, newsletter, fact sheets, etc., as a primary information delivery vehicle for decades. This publication technology is essentially obsolete in the computer age, particularly for the shorter and frequently updated pieces. Only a few states have now reached or neared saturation with respect to terminal installations in County Extension offices, but this is certain to change quickly. At that point one should look for significant modifications in the Extension publications area.

(Schmidt, 1981)

A study undertaken at Cornell University attempted to analyze the value of the microcomputer as a decision aid in farm marketing decisions. The computerized decision-aid was evaluated over two crop years and provided an increase of 30 cents per bushel for each of the years in the test.

(Gossard, 1981)

Computer use is still somewhat limited due to hardware-software problems, but, as these problems are overcome, experts predict that the computer will become as common as the desk top calculator to farm operators. Approximately 1000 farmers in Alberta currently own microcomputers. 40 Alberta farmers subscribe to either Telidon or Agnet computer services. At present the primary uses of computers on farms in Alberta are:

1. Record-keeping

- accounting

- production

2. Recreational

3. Planning and Decision-Making

It is anticipated that 20-30% of Alberta farmers will purchase microcomputers in the next five years.



## Overview

The farmer is in a position such that he requires information on a continual basis as farming technology and farm management techniques are continually changing. In order to be competitive and/or efficient, the farmer must recognize these changes, be able to understand and evaluate them, and be able to make decisions pertaining to the viability of implementing a particular innovation. In order to be able to do this he must receive the info in such a way that it is not only localized and applicable to his particular operation, but it must be timely (close to the time in which the decision should be made and/or at a time when he can be available to read the material). This information must also be received in a format that is concise, unbiased and understandable.

The most apparent problem is not one of receiving too much information but a lack of a coordinating system that would ensure easy access to all kinds of specific or general enquiries.

Farm magazines are an information source that is becoming increasingly specialized in light of the differing informational needs of farmers and the diversity of information the farmer requires in order to make decisions. Farmers have a wide variety of concerns ranging from being a good manager and increasing efficiency on the farm to increasing time off and providing a college education for their children. In order to be able to make these decisions, farmers realize that they need to have more information that can be used in a variety of ways. Faced with time constraints and the problem solving complexities of day-to-day decision making, farmers look to reliable, credible and concise information sources to fulfill these needs. These sources include successful farmers, seminars, television, radio, magazines, and specialists.



SECTION VI  
PROVINCIAL TELEPHONE SURVEY RESULTS

## 1. Farmer Profiles for 1983

### A. Respondents

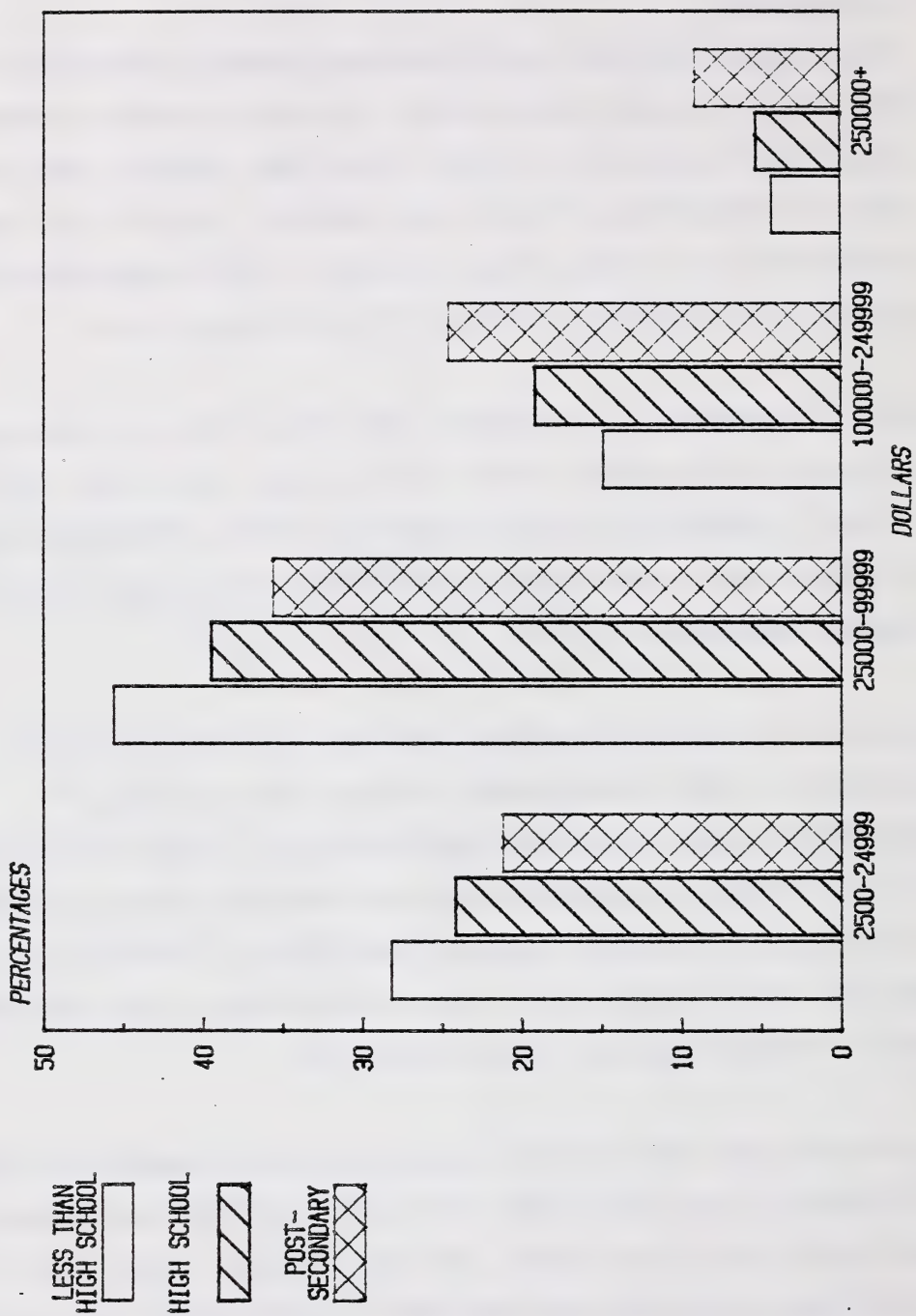
A sample quota of 70% male and 30% female was imposed by The Heffring Research Group Ltd. on the sample investigation. The ages of respondents compare favorably with those given by the 1981 census data, suggesting that the current sample is representative of Alberta farm operators. Two out of ten respondents are between 15 and 34 years of age, 23.8% are in the 35-44 age category, 26.0% are 45-54, and an additional 27.9% are 55 years of age or older.

45.9% of respondents did not complete high school, 28.4% have a high school education, and one-quarter attended a post-secondary institution. As indicated in Table 1 (Appendix D), age and education are related. Respondents over 54 years of age are least likely to have obtained a high school or post-secondary education.

One-quarter of respondents reported gross farm sales from agricultural production in 1982 of \$2,500-34,999, 41.2% had gross farm sales of \$25,000-99,999, and an additional 23.9% fell in the \$100,000 and over category. As shown in Graph 1, respondents with a post-secondary education are most likely to have gross farm sales of \$100,000 or more (Table 2, Appendix D). In addition, respondents age 55 and older are least likely to have gross farm sales of \$100,000 and over (Table 3, Appendix D).

In the last year, seven out of ten respondents were not employed off the farm, 16.7% worked as much as six months off the farm, and 10.8% were employed off the farm for six to twelve months. Off-farm employment was not found to vary significantly by the sex of the respondent. Respondents with less than a high

GRAPH 1  
EDUCATION AND GROSS FARM SALES



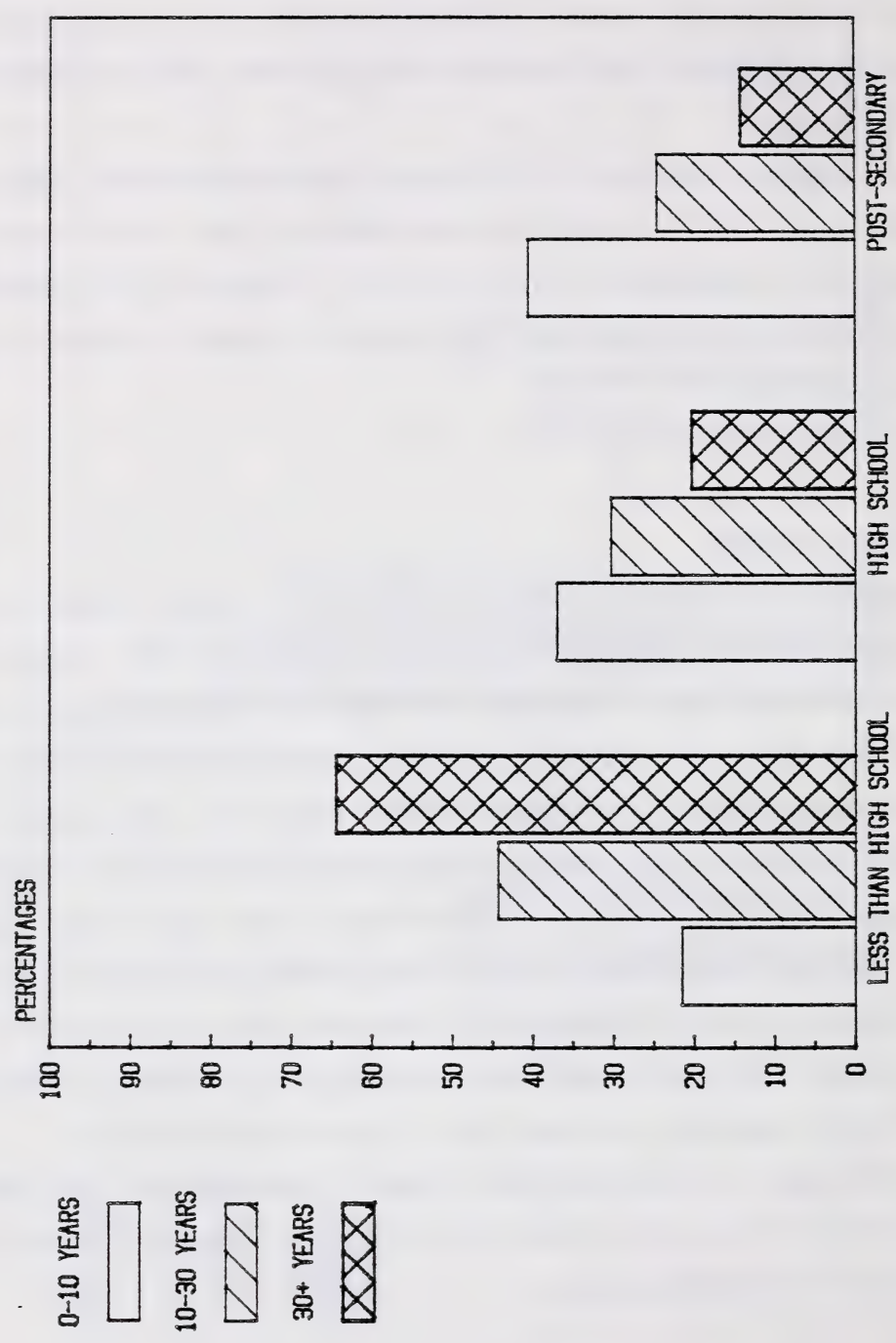
school education and those age 55 and older are least likely to have been employed off the farm last year. (Tables 4 and 5, Appendix D). Respondents with gross farm sales of less than \$25,000 were significantly more likely to have been employed off the farm than other respondents (Table 6, Appendix D).

Four out of ten respondents do not belong to farm organizations. Those farm organizations with the highest reported memberships are: United Farmers Association, Alberta Wheat Pool, and Unifarm. At present, 5.1% of respondents own a computer and an additional 16.9% intend to purchase a computer in the next five years.

#### B. Farm Operation

One-quarter of respondents have been farming for ten years or less, four out of ten have farmed for eleven to thirty years, and 34.5% have been farming for more than thirty years. Respondents who have been farming for thirty years or more tend to have less than a high school education (Graph 2) and are unlikely to be employed off the farm (Tables 7 and 8, Appendix D). Age is directly related to length of time farming, with respondents in the 55 and over age category most likely to have farmed for thirty or more years (Table 9, Appendix D). The relationship between length of time farming and income is more complex as outlined in Table 10 (Appendix D). Respondents who have farmed for ten years or less are significantly more likely to have gross farm sales of \$2,500-24,999 than other respondents and least likely to have gross farm sales of \$25,000-99,999. On the other hand, it appears respondents who have farmed for thirty or more years are less likely than other respondents to have gross farm sales of \$100,000 or more.

GRAPH 2  
LENGTH OF TIME FARMING, EDUCATION





72.6% of respondents raise cereal crops, 19.0% grow oilseed crops, and 55.9% have beef cattle. As outlined in Table 11 (Appendix D), 31.0% of respondents are grain farmers, 13.0% are cattle ranchers, 23.9% have a mixed (grain and cattle) operation, an additional 8.0% rely on single sources of farming income other than cattle, and 24.2% have mixed operations other than grain and cattle.

Education levels do not differ significantly between grain farmers and cattle ranchers (Table 12, Appendix D). More cattle ranchers are between the ages of 45 and 54 and more grain farmers are 55 years of age and older (Table 13, Appendix D). As indicated in Table 14 (Appendix D), in comparing grain and cattle enterprises, cattle ranchers had gross farm sales of \$2,500 to \$24,999 and a greater percentage of grain farmers had gross farm sales between \$100,000 and \$249,999. The proportion of grain farmers who own 760 or more acres of cultivated land is significantly greater than for cattle ranchers. (Table 15, Appendix D).

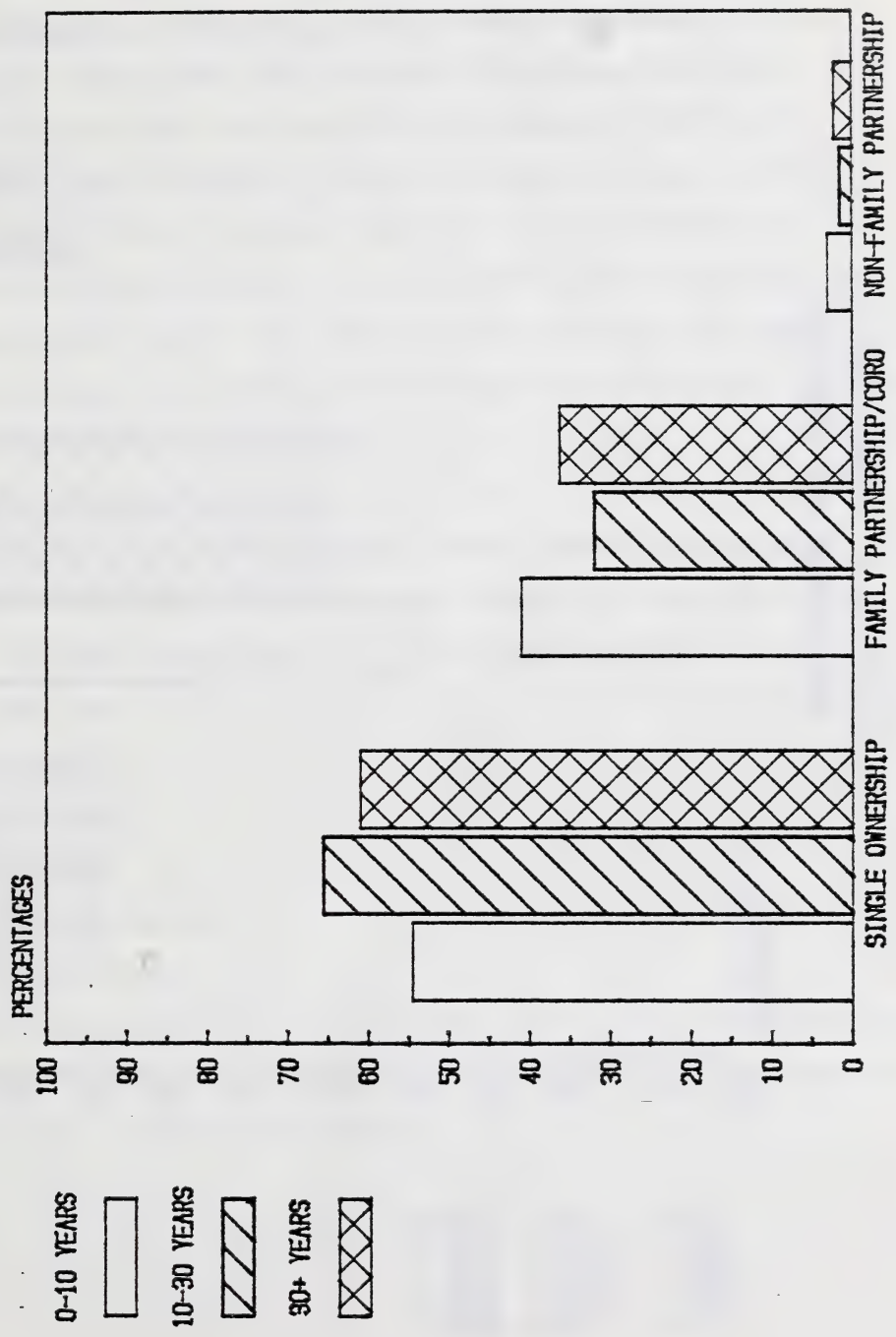
27.9% of respondents own less than 240 acres of cultivated land, 35.5% own between 240 and 559 cultivated acres, 22.8% own 560 to 1119 acres, and 11.0% have more than 1119 acres of cultivated land. 54.5% of respondents do not rent cultivated land from someone else, 17.7% have rented less than 240 acres, 14.0% rent between 240 and 559 cultivated acres, 7.6% have rented 560 to 1119 acres, and 3.9% have rented more than 1119 acres of cultivated land from someone else. Table 16 (Appendix D) shows a trend as the number of acres of cultivated land owned increases, so does the number of acres of cultivated land rented from someone else.

Tables 17 through 21 (Appendix D) illustrate the impact of demographic variables on acres of cultivated land owned. A significantly greater

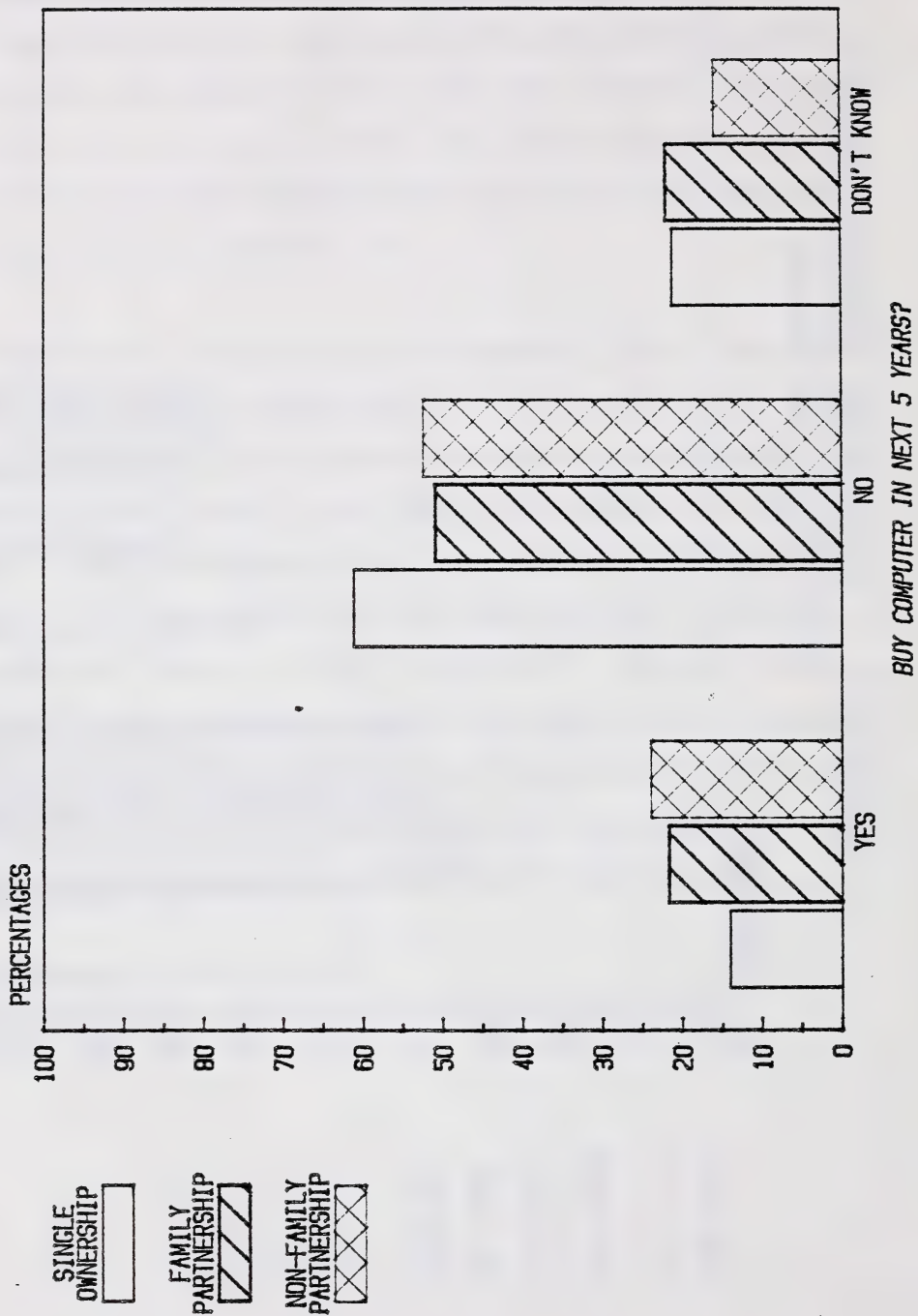
proportion of respondents under age 45 own less than 240 acres of cultivated land. A direct relationship exists between income and acres of cultivated land owned. Respondents with income of \$250,000 or more are most likely to own 760 acres of cultivated land or more. Respondents with a post-secondary education are more likely than other respondents to own less than 240 acres of cultivated land. Respondents who were employed off the farm last year own fewer acres of cultivated land and respondents who have farmed for more than ten years own significantly more acres of cultivated land.

61.3% of respondents have a single ownership arrangement, 35.6% of farms are owned by family partnerships or corporations, and 2.1% operate as a non-family partnership or corporation. Single ownership arrangements are most common among respondents who have farmed for more than 10 years (Graph 3). Family partnerships or corporations are most common among respondents who own more than 1119 acres of cultivated land or rent more than 559 acres of cultivated land from someone else (Tables 22, 23 and 24, Appendix D). As shown in Graph 4, respondents with a single ownership operation are least likely to indicate a future intention to purchase a computer. (Table 25, Appendix D). Respondents under the age of 35 are significantly more likely than other respondents to operate a family partnership or corporation (Table 26, Appendix D).

GRAPH 3 - BUSINESS ARRANGEMENT  
AND LENGTH OF TIME FARMING



GRAPH 4 - BUSINESS  
ARRANGEMENT AND COMPUTERS



## 2. Information Needs

Respondents were asked to indicate how important various types of information are to the operation of their farm. Those information areas rated as most important are: Selection and use of agricultural chemicals, Business management, Crop production technology, and Home management and family relationships. Female respondents are more concerned than males with Daily market information, Market forecasts, Selection and use of agricultural chemicals, and Government policies. The rank ordering of important types of information, however, does not vary significantly by sex (Table 27, Appendix D). Cattle ranchers rate livestock production technology as the most important information need (Table 28, Appendix D).

54.1% of respondents were unable to identify other types of information important to the day-to-day decisions on the farm and 33.0% mentioned weather forecasts. The major issues identified as being important to farmers in the next five years are:

1. Crow Rate
2. Crop Prices
3. Marketing
4. Cost/Price Squeeze
5. Production Costs

A useful information source for farming exhibits the following characteristics: Reliable/Accurate, Based on experience, Easy to understand, Local/Applicable to my area, and Easy to obtain/Ease of access.



### 3. Information Sources

Those information sources which were rated as most useful by respondents are:

1. Neighbors and Friends
2. Radio
3. Alberta Department of Agriculture
4. Farm Magazines and Newspapers
5. District Agriculturist

Universities and Colleges, County field man, Agriculture Canada, and Television received the lowest ratings as useful information sources for farming.

Respondents who have been farming for less than thirty years rate television as a more useful information source than do respondents who have farmed for thirty or more years. In addition, farmers who have been farming for thirty or more years rate elevator agents and county field men higher than other respondents do.

Radio is identified as the best source of daily market information and market forecasts. Respondents rely on farm magazines and newspapers for information on livestock production technology. Farm magazines, newspapers, and District Agriculturists are given as the best sources for crop production technology information. For information on the selection and use of agricultural chemicals, respondents look to elevator agents, suppliers/dealers, and District Agriculturists. Personal experience and Bankers are the best sources of business management information. The best sources of information on government policies are newspapers and radio. Respondents rely primarily on personal experience for information on home management and family relationships. Females are more likely than males to identify the District Home Economist as a source of information on home management and family relationships (Table 29, Appendix D).

Respondents who have been farming for thirty years or more rely less on farm magazines and newspapers for livestock and crop production technology information than other respondents. In addition, these respondents are more likely to rely on elevator agents for information on the selection and use of agricultural chemicals and on personal experience for business management information.

Table 30 (Appendix D) outlines the differences between grain farmers and cattle ranchers. Grain farmers rely on radio for market forecasts more so than do cattle ranchers. The best sources for livestock production technology information, according to cattle ranchers, are farm magazines and newspapers. Grain farmers are more likely to rate elevator agents as good sources of information on the selection and use of agricultural chemicals.

#### 4. Alberta Department of Agriculture

##### A. Awareness and Contact

98.5% of respondents are aware of the Alberta Department of Agriculture. For the majority of respondents, Alberta Agriculture is synonymous with farming information and the District Agriculturist. Respondents age 15 to 34 are more likely to mention District Agriculturists and respondents 55 and over are more likely to say farming information is the first thing that comes to mind when they think of Alberta Agriculture (Table 31, Appendix D). Respondents who own 760 or more acres of cultivated land, those who have contacted Alberta Agriculture in the past year, and respondents with gross farm sales of \$100,000 or more are most likely to associate the District Agriculturist with Alberta Agriculture. (Tables 32, 33, and 34, Appendix D).

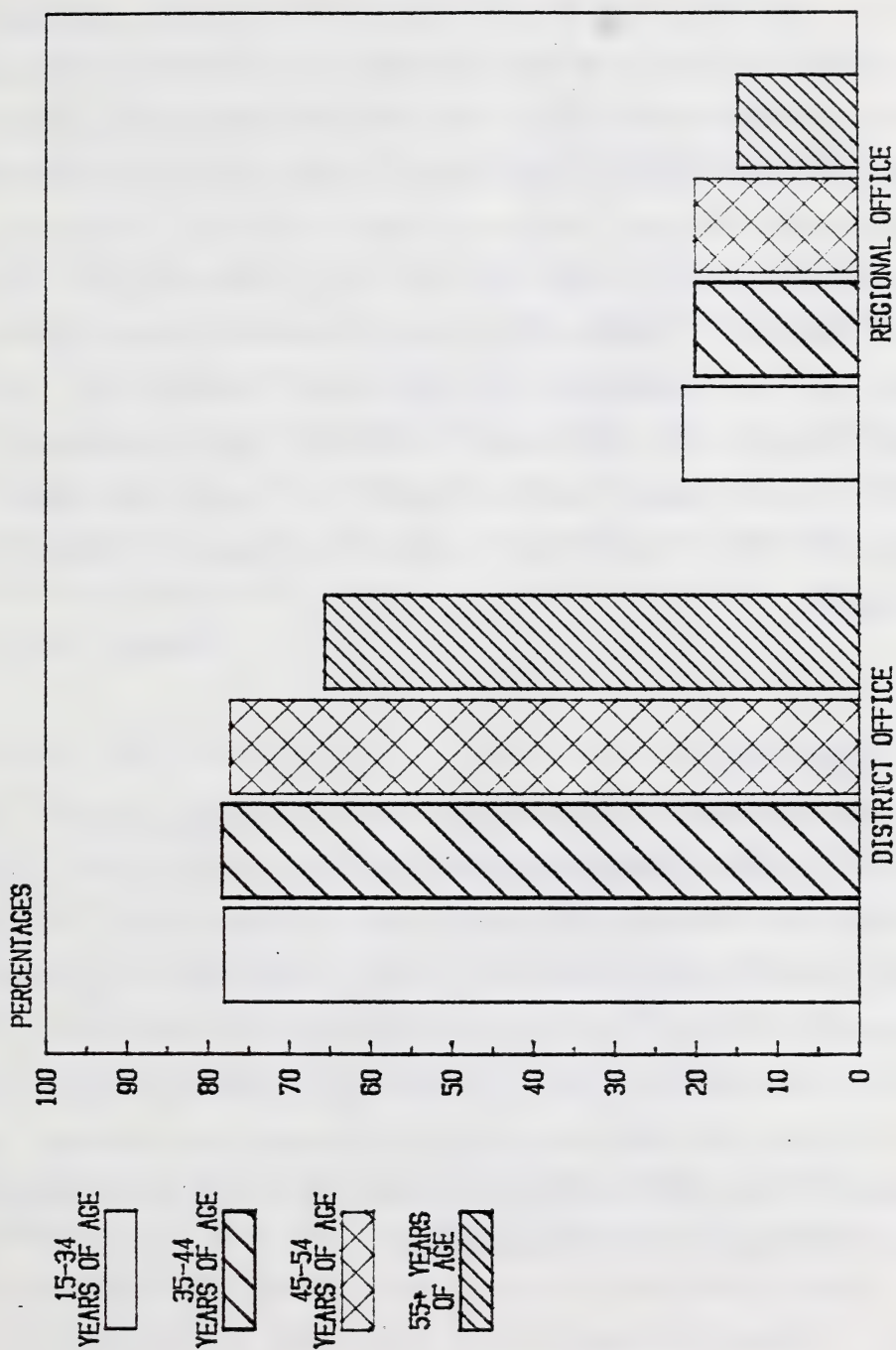
In the past year, three-quarters of respondents have contacted someone from the district office of the Alberta Department of Agriculture. 92.0% of these respondents contacted the District Agriculturist. 18.9% of respondents contacted someone from the regional office and 7.6% contacted the Provincial Headquarters Offices of Alberta Agriculture in the past year.

Respondents age 15-54 (Graph 5) are significantly more likely to have contacted a district or regional office of Alberta Agriculture (Table 35, Appendix D).

Table 36 (Appendix D) shows that gross farm sales and contact with Alberta Agriculture are related, with respondents having gross farm sales of \$100,000 or more most likely to have contacted an office of Alberta Agriculture. A direct relationship is also apparent between acres of cultivated land owned, education, and contact with Alberta Agriculture (Tables 37 and 38, Appendix D).

Contact with Alberta Agriculture does not vary significantly by farming

GRAPH 5 - AGE AND CONTACT  
WITH ALBERTA AGRICULTURE





enterprise (Table 39, Appendix D).

20.1% of respondents have not contacted anyone from Alberta Agriculture in the past year. The majority of these respondents perceive Alberta Agriculture as problem solvers and have not felt a need to contact Alberta Agriculture. Those respondents least likely to have contacted Alberta Agriculture are 55 years of age or older, have gross farm sales of less than \$25,000, have been farming for thirty years or more, and have less than a high school education. (Tables 40-43, Appendix D) Respondents who have not contacted Alberta Agriculture were asked under what circumstances they would contact the Department. The most common responses were: Weed control information, Chemical information, and Plant or Animal Disease. (Table 44, Appendix D). Contact with Alberta Agriculture was not found to vary by acres of cultivated land owned or off-farm employment.

#### B. District Office

Of those respondents who have contacted the District Agriculturist in the past year, 92.7% did not experience any problems in contacting the DA by phone, 4.9% indicated that the DA was not available, and 3.0% mentioned that the phone was busy. 90.2% of respondents did not have any problems contacting the District Agriculturist in person, and 9.3% mentioned that the DA wasn't in his office. 11.2% of respondents think that the district office should be open on weekends and 11.1% would like the district office to be open in the evenings. These responses do not vary significantly by length of time farming or the sex of the respondent (Tables 45 and 46, Appendix D).



### C. Image and Satisfaction

Information provided by Alberta Agriculture is perceived as easy to obtain, current/up-to-date, reliable/accurate and easy to understand. 85.2% of respondents are satisfied with the information currently offered by Alberta Agriculture and 97.8% of respondents were unable to indicate how Alberta Agriculture could better serve them and 5.1% would like more field visits.

32.2% of respondents were unable to rate their satisfaction with farm visits, (Graph 6) suggesting that perhaps they have not been exposed to this service. Satisfaction with services offered by Alberta Agriculture does not vary significantly by age, although respondents age 55 or older were least likely to rate their satisfaction. This reflects the lower rate of contact with the Department by respondents in this age group. Satisfaction with Department services is not influenced by the number of cultivated acres owned or the education of the respondent.

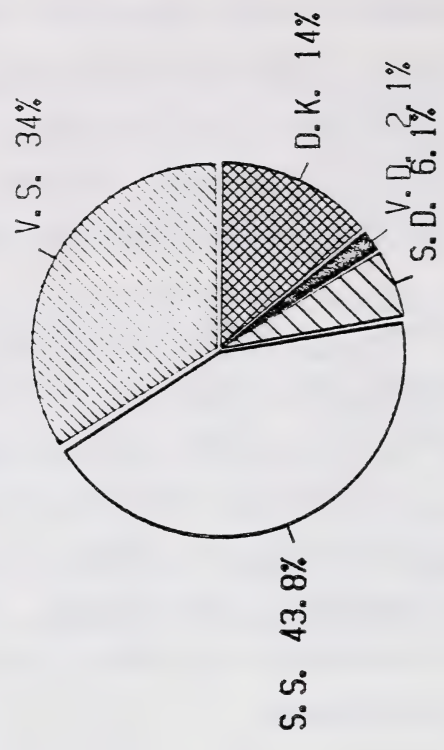
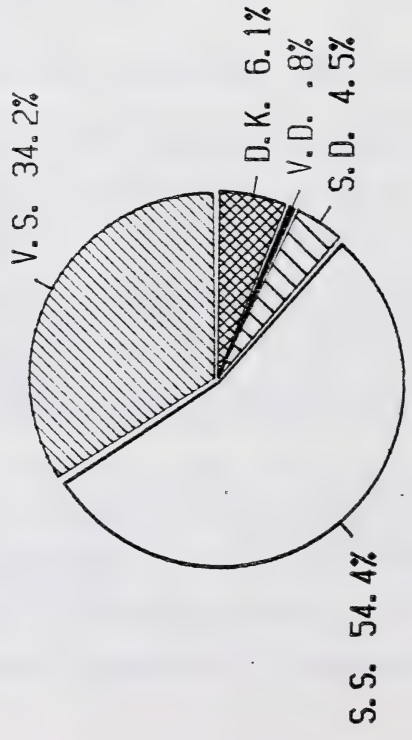
The one variable that does significantly influence satisfaction with Alberta Agriculture services is recent contact with the Department. Respondents who have contacted the district or regional office are significantly more likely to be satisfied with bulletins and pamphlets offered, office consultations, farm visits, and courses and workshops offered. In each case, respondents who have not initiated any contact with the Department are least able to rate their satisfaction with the services offered. (Tables 47 to 58, Appendix D)

It would be useful to 61.4% if Alberta Agriculture had computers to access farming information. 73.7% of these respondents recommended that computer terminals be located in the district office. Length of time farming impacts directly on the perception of usefulness of Alberta Agriculture computer

# GRAPH 6

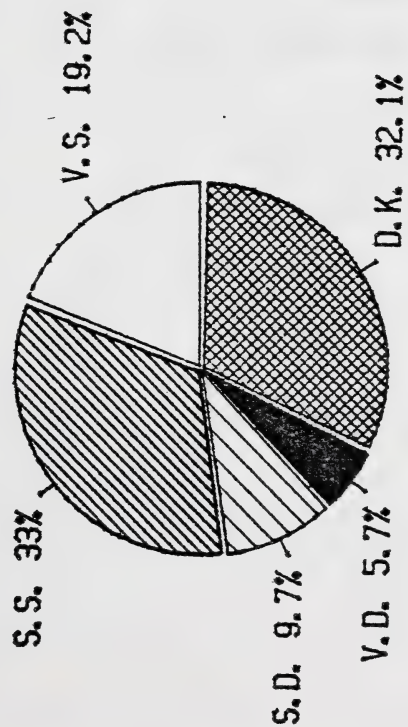
BULLETINS AND PAMPHLETS

OFFICE CONSULTATIONS

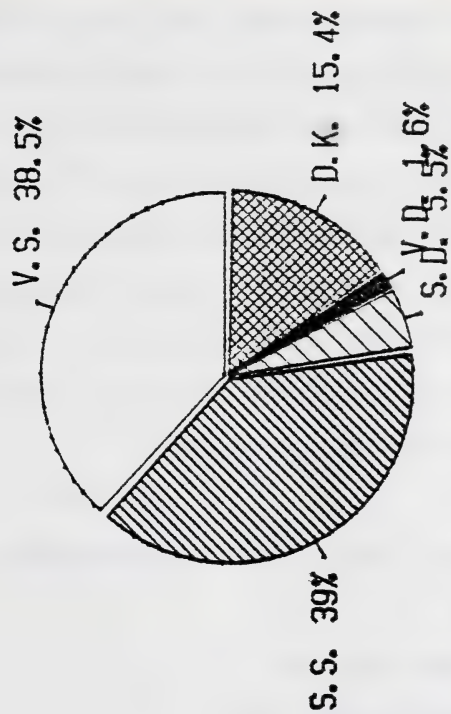


# GRAPH 6

FARM VISITS



COURSES AND WORKSHOPS



terminals, with respondents who have farmed for thirty or more years most likely to rate Alberta Agriculture computer access as not at all useful to them (Table 59, Appendix D). Those respondents who currently own a computer or intend to purchase a computer in the next five years think that it would be useful if Alberta Agriculture had computer access to farming information (Tables 60 and 61, Appendix D). Younger respondents, those with high school or post-secondary education, and respondents with gross farm sales of \$100,000 or more are most likely to rate Alberta Agriculture computer access as a useful concept (Tables 62 to 64, Appendix D).

The most important ways in which Alberta Agriculture can provide information to farmers are:

1. Newspaper Articles
2. Telephone Contact with DA
3. Radio Programs
4. Office Consultations with DA
5. Newsletters
6. Bulletins or Pamphlets
7. Demonstrations

APPENDIX A  
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APPENDIX B  
SAMPLING PROCEDURE



## 1. Target Population

The target population for the study was defined as all commercial farms in Alberta. Statistics Canada defines a census farm as a farm, ranch, or other agricultural holding with sales of agricultural products during 1980 of \$250 or more. This definition includes marginal operations located near urban and rural centres. Based on this definition, 11.9% of Alberta farms are marginal operations; that is, sales of agricultural products during 1980 were between \$250 and \$2,500. For the purpose of this study, the term "commercial" was applied to any farm with sales of agricultural products of \$2,500 or more in a 12 month period. As a result, marginal operations were excluded from the target population.

In 1981, there were 318,361 census farms in Canada and 58,056 census farms in Alberta. 88.1% of the census farms in Alberta represent commercial farms, giving a total target population of 51,164.

## 2. Sampling Frame

Given the definition of the target population as commercial farms based on economic class, the sampling plan utilized the services of Agritel, a direct mailing company. Agritel lists are based on the Public Press Group of farm magazines, primarily "Country Guide". The "Country Guide" circulation in Alberta as of 1981 was 51,229 or 88.2% of all census farms in Alberta and approximately 95% of all commercial farms in Alberta.



### 3. Sample

Following is a breakdown of interviews completed by sex of respondent and region:

Region	Male	Female	Total
Southern	277	118	395
South Central	270	116	386
North Central	270	148	418
Northeast	270	117	387
Northwest	270	115	385
Peace	271	116	387
Total	1628	730	2358

The completion rate for the study was 17.9%

	Actual	% of Total Dialings
Total Dialings	13,158	
No Answer	6,043	45.9%
Disconnected	655	5.0
Terminated	62	0.5
Not Qualified	1,561	11.9
Return No Answer	1,057	8.0
Refusal	1,378	10.5
Business	44	3.3
Complete	2,358	17.9

A total of 13,112 dialings were made to complete 2,312 interviews. Of the total dialings, 46.1% represented no contacts either because the number rang busy or there was no answer. An additional 13.1% represented no contacts either because the number was out of service (disconnected) or the respondent could not be reached even after two callbacks (Return No Answer). Of those numbers contacted, 3.3% represented business numbers and the call was terminated by the interviewer. 11.9% of contacted individuals were disqualified in the screening process for any one of the following reasons:

1. Do not reside on a producing farm
2. Gross annual farm sales of less than \$2,500
3. Employed in marketing research, advertising, or by the Alberta Government.

10.5% of qualified respondents refused to complete the interview and an additional 0.5% terminated the interview part way through for unspecified reasons. Heffring Research Group Ltd. has developed norms for refusal rates to telephone surveys which range from 8.0% to 17.0% for non-threatening services and products up to 35.0% for topical issues such as funeral homes. Based on these norms, the refusal rate for this study is deemed acceptable.

70.6% of respondents contacted were qualified to complete the interview. Of those respondents qualified, 61.6% completed the interview.

The completion rates for each of the six regions were compared to determine if there were significant differences among regions. Peace River region had the highest proportion of qualified respondents. Other than this, no significant differences were noted.

	Southern	South Central	North Central
No Answer	956 (45.8%)	1137 (42.9%)	1169 (43.8%)
Disconnected	93 (4.5)	122 (4.6)	142 (5.3)
Not Qualified	200 (9.6)	295 (11.1)	309 (11.6)
Refusal	184 (8.8)	300 (11.3)	223 (8.4)
Return No Answer	285 (13.7)	391 (14.7)	381 (14.3)
Business	7 (0.3)	8 (0.3)	8 (0.3)
Terminate	5 (0.2)	12 (0.4)	16 (0.6)
Complete	355 (17.0)	383 (14.5)	419 (15.7)
Total Dialings	2085	2648	2667

	North East	North West	Peace
No Answer	956 (41.8%)	1008 (48.7%)	817 (49.4%)
Disconnected	89 (4.5)	122 (5.9)	87 (5.3)
Not Qualified	269 (13.5)	321 (15.5)	167 (10.1)
Refusal	268 (13.5)	219 (10.6)	184 (11.1)
Business	5 (0.3)	9 (0.4)	7 (0.4)
Terminate	16 (0.8)	5 (0.2)	8 (0.4)
Complete	385 (19.4)	385 (18.6)	385 (23.3)
Total Dialings	1988	2069	1655

#### 4. Weighting

A quota of 385 interviews was imposed for each of the six regions of Alberta Agriculture. This, however, does not reflect the actual distribution of farms in Alberta. To obtain a representative sample, it was necessary to weight the results from each region. The calculations for this procedure are outlined in the following tables.

Alberta 1981 Census

Region	Number of Farms Based on 1981 Census	Farms as % of Provincial Total	Actual Sample Size	Sample as % of Total Sample	Representative Sample Size
Southern	8513	14.7%	355	15.4%	340
South Central	7952	13.7	383	16.6	317
North Central	11455	19.7	419	18.1	455
North East	9999	17.2	385	16.6	398
North West	11898	20.5	385	16.6	474
Peace	8239	14.2	385	16.6	328
Total	58056	100.0%	2312	100.0%	2312

Multipliers to reflect representative sample for province.

Region	Multiplier	Actual Sample Size	Representative Sample Size
Southern	.958	355	340
South Central	.828	383	317
North Central	1.086	419	455
North East	1.034	385	398
North West	1.231	385	474
Peace River	.852	385	328
	5.989	2312	2312

For each region, the total number of farms was calculated as a percentage of all farms in Alberta based on the 1981 census. Given a total of 2312 completed interviews, it was then calculated what percentage of this would accurately reflect each region. For example, farms in the southern region represent 14.7% of all farms in Alberta. The interviews completed in the southern region, however, represent 15.4% of all interviews completed. To obtain an accurate representation of the southern region for the provincial results it is necessary to reduce the impact of the southern region on the total results by weighting the results of the southern region. If the southern region had not been oversampled, 340 interviews would have been conducted in the southern region to represent 14.7% of all interviews conducted. The actual sample size of 355 is, therefore, multiplied by .958 to obtain the representative sample size of 340.



APPENDIX C  
PROVINCIAL QUESTIONNAIRE AND FREQUENCIES

## B. Statistical Notes

### 1. Statistical Reliability

The sample size for the province provides results which are accurate to within  $\pm 2\%$  at the 95% confidence level. That is, if an observed percentage result is 50%, the chances are 95 in 100 that a range of  $\pm 2\%$  (48% to 52%) includes the true percentage of all farmers in the province.

### 2. Average Score

For each question which used a rating scale, an average score is included to allow for comparisons. The average scores allow for ranking of responses and do not include respondents who did not answer the question. The average score represents a rating for the response. If a response has an average score of 2.1 on a scale of 1 to 5, with 1 being very important and 5 being not at all important, the response is somewhat important.

### 3. No Responses

For each question, the total number of individuals who were asked the question is indicated by the capital letter 'N'.

#### Example:

#### 1. How long have you been farming?

	N=355
0-5 years	5.1%
6-10 years	18.3
11-20 years	24.2
21-30 years	18.9
30+ years	33.5
Refused	0.0

In this case, N equals 355, indicating that 355 respondents were asked this question. None of the respondents refused to answer the question, so the

category "refused" shows 0.0%.

#### 4. Multiple Responses

In some cases, respondents were allowed to give more than one response to a question. A single response is recorded for each question unless otherwise indicated.

##### Example:

15. What problems, if any, did you have in trying to contact the District Agriculturist by telephone? Anything else? (2 responses allowed)

	N=232
None	90.9%
Phone busy	3.9
Not available	8.2

In cases where multiple responses are allowed, the percentages will add up to more than 100, because each respondent is allowed to give more than one response.

#### 5. Rounding Errors

In calculating the percentage responses for each question, the computer rounds the response to one decimal place. As a result, rounding errors may occur.

##### Example:

5. What type of business arrangement do you have on your farm? Is it a...

	N=355
Single ownership	49.3%
Family corporation/Partnership	48.2
Non-family corporation/Partnership	2.0
Crop shares	0.3
No response	0.3

Total 100.0%

Provincial N=2325

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Project Number 83 - 062

I.D. # \_\_\_\_\_

Date: \_\_\_\_\_

Interviewer: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Region:	Southern	N=340
	South Central	N=317
	North Central	N=455
	North West	N=398
	North East	N=474
	Peace	N=328
	No response	N =13

Hello, I'm \_\_\_\_\_ representing The Heffring Research Group, a Calgary based marketing research company. We are conducting a survey on agriculture concerning information required to maintain a viable farm.

This interview will take about fifteen to twenty minutes. Do you have time to talk with me at this time?

YES - CONTINUE

NO - SET UP CALL BACK

#### SCREENING

A. Do you live on a producing farm with annual sales from agricultural products of \$2,500 or more?

Yes

No -----TERMINATE POLITELY

B. May I speak to the farm operator in your household? (OR FEMALE HEAD OF HOUSEHOLD) CHECK QUOTA

Yes -----REINTRODUCE SELF, IF NECESSARY, AND CONTINUE WITH SCREENING

Not Available -----ARRANGE CONVENIENT TIME FOR CALLBACK

C. Are you or any member of your household employed in marketing research, advertising, or by the Alberta Government?

IF YES, TERMINATE POLITELY

1. How long have you been farming?

N=2325

0-5 years	7.7%
6-10 years	16.9
11-20 years	21.0
21-30 years	19.4
30+ years	34.5
Refused	0.4

2. What are the major sources of income from your farming operation? (IF RESPONDENT SAYS BEEF CATTLE, PROBE FOR FAT CATTLE, CALVES OR FEEDERS, BREEDING STOCK. IF RESPONDENT SAYS CORN, PROBE FOR FORAGE OR VEGETABLE) (3 responses allowed)

N=2325

Cereal crops (wheat, oats, barley)	72.6%
Oilseed crops (canola/rapeseed, flax, mustard)	19.0
Forage crops (hay)	9.9
Forage seeds	2.0
Special crops (lentils, peas, etc.)	1.8
Vegetable crops	0.9
Dairy cattle	8.7
Beef cattle/Fat cattle	17.8
Beef cattle/Calves or Feeders	29.6
Beef cattle/Breeding stock	8.5
Hogs	7.6
Sheep	1.2
Poultry	1.3
Forage Corn	0.1
Vegetable Corn	0.0
Horses	0.3
Sugar Beets	0.5
Alfalfa	0.1
Honey/Beekeeping	0.1

3. How many acres of cultivated land do you own?

4. How many acres of cultivated land do you rent from someone else?

N=2325

	Q. #3	Q. #4
	-----	-----
None	2.9%	54.5%
Less than 240 acres	25.0	17.7
240 - 399	19.4	8.3
400 - 559	16.1	5.7
560 - 759	11.6	4.2
760 - 1,119	11.2	3.4
1,120 - 1,599	5.3	2.2
1,600 - 2,240	3.8	1.2
More than 2240	1.9	0.5
Refused/Don't know	2.8	2.0



5. What type of business arrangement do you have on your farm? Is it a...

N=2325

Single Ownership	61.3%
Family Partnership/Corporation	35.6
Non-Family Partnership/Corporation	2.1
Crop shares	0.1
No response	1.0

Now I'd like to talk about the types of information needs you have with your farming operation.

6. On a scale of 1 to 5 with 1 being very important and 5 being not at all important, please indicate how important the following types of information are to the operation of your farm.

	N=2325					No Resp.	Av. Score
	1	2	3	4	5		
Daily market information	28.9%	24.1%	26.8%	10.7%	9.1%	0.3%	2.5
Market forecasts	23.7	30.7	25.8	10.5	9.0	0.3	2.5
Livestock production technology	21.1	24.6	20.0	10.2	23.4	0.6	2.9
Crop production technology	33.1	34.6	18.5	7.0	6.1	0.7	2.2
Selection and use of agricultural chemicals	42.0	28.6	13.1	6.9	8.9	0.5	2.1
Business management	37.5	28.8	21.2	7.4	4.7	0.4	2.1
Home management and family relationships	38.1	24.6	20.8	8.7	7.3	0.5	2.2
Government policies	19.7	23.1	28.2	12.9	15.3	0.7	2.8

7. What other types of information are important to the day to day decisions of your farm? Any others? (2 responses allowed)

N=2325

Weather forecasts	33.0%
None	54.1
Money management	1.2
Weed control	0.4
Production costs	0.6
Machinery repairs/Selection	2.2
Interest rates	1.5
Pricing of products	3.4
Chemicals/Fertilizers	0.9
World market prices/Export Market	4.8
Land management	0.3
Water conservation/Pollution	0.3
Fuel conservation	0.6
Machinery technology/Costs	2.0
Income tax	0.2
Quota Systems	0.7
New types of seeds	0.5
Veterinary information	0.1
Market forecasts	0.6
Stock breeding program	0.3
Soil management	0.3
Farm management	0.2
Insect control	0.2

8. Following is a list of information sources which might prove useful in operating a farm, that is, they help you run your farm better. On a scale of 1 to 5, with 1 being very useful and 5 being not at all useful, please indicate how useful you find each of these information sources to your farm operation. (ROTATE STARTING POINT)

	N=2325					No	Average
	1	2	3	4	5	Resp.	Score
Universities and colleges	8.9%	19.7%	27.1%	18.6%	24.1%	1.5%	3.3
Agriculture Canada (Federal)	9.4	21.1	32.3	20.9	15.6	0.6	3.1
Radio	32.3	38.3	19.8	5.5	3.8	0.4	2.1
Television	12.9	23.7	26.5	20.5	16.1	0.3	3.0
Alberta Department of							
Agriculture (Provincial)	31.4	40.5	19.9	4.8	2.8	0.6	2.1
Suppliers	25.9	36.2	26.6	6.8	3.9	0.6	2.3
Bankers/other credit agencies	27.9	24.6	21.6	14.0	11.5	0.4	2.6
Farm magazines and newspapers	29.5	43.1	20.7	4.5	1.8	0.4	2.1
Neighbours and friends	40.0	35.4	18.2	4.4	1.6	0.4	1.9
District Agriculturist	32.6	36.3	19.7	7.1	3.8	0.5	2.1
Elevator agents	28.6	33.4	18.8	8.7	9.8	0.6	2.4
County Field man	9.9	22.6	26.4	18.1	21.6	1.3	3.2
Veterinarians	35.5	25.2	13.1	5.8	19.7	0.7	2.5

What we want to talk about now are the sources of information that you feel are the BEST, that is, the most useful in operating your farm. Let's start with daily market information...

9. (FOR THE FOLLOWING QUESTIONS, REFER TO TABLE ON FOLLOWING PAGE.)

- A. What is the best source of daily market information?
- B. What is the best source of market forecasts?
- C. What is the best source of livestock production technology information?
- D. What is the best source of crop production technology information?
- E. What is the best source of information on the selection and use of agricultural chemicals?
- F. What is the best source of business management information?
- G. What is the best source of information on government policy?
- H. What is the best source of information on home management and family relationships?

N=2325	A	B	C	D	E	F	G	H
UNIVERSITIES AND COLLEGES	--%	--%	0.7%	0.7%	0.2%	1.9%	0.1%	0.2%
AGRICULTURE CANADA (FEDERAL)	0.1	0.2	0.3	0.3	0.1	0.1	0.5	--
RADIO	75.1	44.6	8.4	6.3	2.5	2.2	14.8	2.6
TELEVISION	2.4	2.4	1.5	1.1	0.6	0.3	7.7	1.9
ALBERTA AGRICULTURE (PROV.)	0.6	2.7	2.9	4.3	3.3	4.4	3.5	1.8
SUPPLIERS/DEALERS	0.1	0.2	0.6	2.2	18.3	0.2	0.1	--
CONSULTANTS	0.2	0.3	--	--	0.1	7.1	1.2	0.2
MARKETING FIRMS	1.4	1.2	1.5	0.2	--	0.1	0.3	--
PERSONAL EXPERIENCE	0.2	0.9	3.3	4.7	1.8	16.3	1.1	20.9
BANKERS/CREDIT AGENCIES	0.1	0.1	--	0.1	0.1	17.1	0.7	0.1
FARM MAGAZINES	1.9	11.1	22.7	21.6	9.8	8.1	6.6	9.7
NEWSPAPERS	4.2	15.1	13.5	16.4	7.7	7.9	22.0	9.5
HOME STUDY COURSES	0.1	--	--	--	--	--	--	--
NEIGHBOURS, FAMILY/FRIENDS	0.7	1.0	1.4	2.8	3.6	3.1	0.9	6.3
DISTRICT AGRICULTURIST(DA)	0.5	0.6	7.7	16.7	15.2	9.9	10.9	4.0
DISTRICT HOME ECONOMIST(DHE)	--	--	0.1	--	--	0.3	0.1	8.4
ELEVATOR AGENTS	2.6	3.1	0.1	6.5	19.1	0.1	0.5	--
MARKET REPORTS	0.3	--	0.1	0.1	--	--	--	--
FARM ORGANIZATIONS	--	--	--	--	0.1	--	0.1	0.1
COUNTY FIELD MAN	0.1	--	0.2	0.3	2.4	0.1	0.1	0.2
DON'T KNOW/NO RESPONSE	4.8	9.6	26.2	9.4	8.1	16.1	16.9	25.2
CHURCH	--	--	--	--	0.1	--	0.1	5.2
RESEARCH STATION	--	--	0.5	1.8	0.7	0.1	--	--
WEATHER REPORT	--	--	--	--	--	--	--	--
NEWSLETTERS/PAMPHLETS	1.0	3.3	1.4	2.7	2.9	1.1	3.5	1.1
BOOKS	--	0.1	0.4	0.3	0.6	0.3	--	0.5
SEMINARS/LECTURES	--	--	0.9	0.8	1.4	2.2	0.1	1.0
COMMODITY FUTURES	0.1	0.4	--	--	--	--	--	--
M.L.A.	--	--	--	--	--	0.1	6.8	--
VETERINARIANS	--	0.1	3.5	--	--	0.1	--	--
DEMONSTRATIONS/FAIRS	--	0.1	0.1	0.1	0.4	0.1	--	0.1
FEEDLOT/FEEDMILL/AUCTIONS	1.0	1.0	1.1	0.1	--	--	--	0.1
COMPUTER	0.1	0.1	--	--	--	0.1	--	--
MARKETING BOARDS	0.4	0.3	0.1	--	0.2	--	0.2	--
TOLL FREE NUMBER	1.3	0.6	0.1	--	--	--	--	--



10. Following is a list of characteristics which may or may not be important in determining a useful information source. On a scale of 1 to 5, with 1 being very important and 5 being not at all important, please rate how important you feel each characteristic is in determining a useful information source for farming.

	N=2325					No	Average
	1	2	3	4	5	Resp.	Score
Current/up-to-date	58.7%	27.8%	9.8%	1.6%	1.2%	0.9%	1.6
Reliable/accurate	62.9	25.5	8.5	1.7	0.8	0.7	1.5
Unbiased	48.2	26.6	18.2	3.5	2.3	1.1	1.9
Based on experience	60.5	30.2	7.5	0.8	0.4	0.6	1.5
Practical/easy to apply	57.1	30.7	9.3	1.8	0.5	0.6	1.6
Easy to understand	63.7	25.0	9.0	1.1	0.6	0.6	1.5
Concise/brief	48.0	32.3	15.4	2.8	0.7	0.9	1.8
Local/applicable to my area	60.8	26.3	9.0	2.5	0.7	0.7	1.5
Easy to obtain/Ease of access	62.0	28.9	6.6	1.3	0.5	0.7	1.5

11. Have you heard of the Alberta Department of Agriculture?

	N=2325
Yes	98.5%
No	0.9----GO TO QUESTION 32
No response	0.6

12. What's the first thing that comes to mind when I say Alberta Department of Agriculture?

	N=2297
Research Station	5.0%
District Agriculturist (D.A.)	29.5
Irrigation Schedule	0.2
Don't know	10.6
Alberta Development Corp.	0.4
Better than Federal	0.1
Farming Information	30.8
No practical experience	0.2
4 H	0.5
Resource management	0.4
Seminars/Courses/College	1.0
Farm Insurance/Grants	1.0
Poor advice/Poor service	1.6
District Office	0.9
High staff turnover	0.2
Helpful	3.6
Government/Bureaucrats	5.1
Alberta Weekly	0.4
Crow Rate	0.1
Home Economist	1.7
Minister	1.3
Bulletins/Pamphlets/Newsletters	1.2
Waste of money	0.8
Livestock specialist	0.6
Marketing boards/Market reports	0.8
County fieldman	0.3
New technology/laboratories	0.2
Alberta radio broadcast	0.2
Soil testing	0.2
Chemicals and Fertilizer	0.8



13. In the past year, did you contact anyone from the District Office of the Alberta Department of Agriculture?

N=2299

Yes 74.9%

No 25.1----GO TO QUESTION 18

14. Who did you contact at the District Office of the Alberta Department of Agriculture? (IF RESPONDENT GIVES NAME OF INDIVIDUAL ASK "WHAT IS THEIR POSITION?")

N=1721

District Agriculturist

92.0%

District Home Economist

2.1-----GO TO Q.18

Crop Specialist/Horticulturist

0.9

Secretary

0.9

Loan officer

0.6

Scientist at experimental farm/

Research Station

0.5

Livestock specialist/Vet

0.5

Engineer

0.6

Fieldman

1.6

No response

0.3-----GO TO Q.18

15. What problems, if any, did you have in trying to contact the District Agriculturist (DA) by telephone? Anything else? (2 responses allowed)

N=1584

None

92.7%

Phone Busy

3.0

Not Available

4.9

Didn't have information

0.1

Long distance charges

0.3

Wouldn't give information over the phone

0.3

Doesn't return calls

0.1

16. What problems, if any, have you had in trying to contact the District Agriculturist (DA) in person? Anything else? (2 responses allowed)

N=1584

None

90.2%

He wasn't in office

9.3

Parking

0.2

Did not get back to me

0.2

Long distance charges

0.1

Not available at noon/after hours

0.2

Too far away

0.1

Too busy

0.5

Disinterested in his job

0.1

17. Do you think that the District Office should.....

N=1628

Yes

No

Be open on weekends

11.2%

88.8%

Be open in the evenings

11.1

88.9

18. In the past year did you contact anyone from the Regional Office of the Alberta Department of Agriculture?

N=2298

Yes 18.9%

No 81.1---GO TO QUESTION 20

19. Who did you contact at the Regional Office of the Alberta Department of Agriculture? (IF RESPONDENT GIVES NAME OF INDIVIDUAL ASK "WHAT IS THEIR POSITION?)

	N=434
Irrigation Specialist	2.5%
Swine Specialist	2.3
District Agriculturist	22.4
Loan Officer	3.5
Home Economist	4.4
4 H Specialist/Leader	4.8
Regional Manager	2.8
Secretary	1.4
Dept. of Energy and Natural Resources	1.4
Don't know	18.2
Poultry Specialist	0.5
Grain Specialist	2.3
Water Well Specialist	1.8
Dairy Commissioner	3.0
Livestock specialist	5.3
Engineer	6.9
Soil test lab/Chemical Consultant	2.1
Business analyst	1.2
County fieldman	4.4
Veterinarian	2.3
Green certificate program	0.2
Statistician	0.5
Horse Industry Branch	0.2
Lawyer	0.5
Minister	0.7
Horticulturist	1.2
Research Station	1.4
No response	1.8

20. In the past year have you contacted anyone from Provincial Headquarters Offices of the Alberta Department of Agriculture?

N=2293

Yes 7.6%

No 92.4-----GO TO QUESTION 22

21. Who did you contact from Provincial Headquarters Offices of the Alberta Department of Agriculture?(IF RESPONDENT GIVES NAME OF INDIVIDUAL ASK "WHAT IS THEIR POSITION?)

	N=175
Business Analyst	2.3%
Minister	10.9
Deputy Minister	4.0
Herd Help Program Manager	0.6
Veterinarian	2.9
Don't know	24.0
Secretary	0.6
Livestock specialist	6.9
Crop Specialist	5.7
Land titles officer	1.7
Assistant Deputy Minister	1.7
Farmer's Advocate	2.9
4-H	1.7
Dairy Control Board	5.1
Chemical specialist	1.7
Herd Health program	1.1
Statistician	0.6
Nutritionist	1.1
District Agriculturist	3.4
Horticulturist	2.9
Publications branch	1.1
Dept. of Environment	2.9
Engineer Consultant	3.4
M.L.A.	1.7
Toll free number	0.6
Fieldman	1.7
Research Department	2.9
Loans Department	1.1
District Home Economist	1.1
Entomologist	0.6

IF RESPONDENT ANSWERED NO TO ALL THREE QUESTIONS - 13, 18, AND 20, ASK QUESTION 22, OTHERWISE GO TO QUESTION 23

22. Why have you not contacted anyone from the Alberta Department of Agriculture in the past year? (Probe) (2 responses allowed)

	N=467
No Need	89.3%
Use Alberta Weekly	0.6
They don't have practical experience/impractical info.	4.1
Get info. from other sources	4.5
Only contact when I have a problem	21.6
Do own research	2.4
Don't know	1.7
No time to do it	0.4
They don't care	0.4

23. Next we would like to know what you think of the information provided by the Alberta Department of Agriculture. On a scale of 1 to 5, with 1 being very good and 5 being very poor, is information provided by the Alberta Department of Agriculture...

	N=2325					No	Average
	1	2	3	4	5	Resp.	Score
Current/up-to-date	33.3%	43.9%	15.8%	2.4%	1.1%	3.4%	1.9
Reliable/accurate	30.6	44.4	17.8	3.0	1.0	3.1	2.0
Unbiased	26.1	36.3	27.1	4.6	1.9	4.0	2.2
Based on experience	21.0	34.7	29.4	7.9	3.2	3.8	2.3
Practical/easy to apply	23.0	39.8	25.8	5.9	1.9	3.6	2.2
Easy to understand	30.2	43.5	17.3	4.3	1.4	3.4	2.0
Concise/brief	22.4	40.9	25.5	5.9	2.0	3.4	2.2
Local/applicable to my area	27.3	35.4	25.5	6.5	1.9	3.4	2.2
Easy to obtain/ease of access	43.2	37.0	12.7	2.8	0.9	3.3	1.8

24. Are there information services you would like to see Alberta Agriculture provide which they are not providing now? (2 responses allowed)

	N=2295
No	85.2%
Estate Planning course	0.2
Marketing report on livestock	0.8
Market forecasts on crops	0.9
Soil testing	0.6
More local research	1.7
Farm management course	0.3
Funding for chemicals	0.2
List of services available	0.8
More concise reports	0.6
Help raise product prices	0.5
Alberta farm guides	0.1
Info. on chemicals and spraying/Fertilizer	2.8
Financial management info.	0.3
Represent farmer to consumers	0.2
Info. on machinery	0.1
More help for young farmers	0.4
More practical experience	0.4
Weekly report should be up-to-date	1.3
More crop research	0.5
More horticultural info.	0.3
Computer information	0.6
Toll free number	0.3
Information on funding available	0.1
Metric conversion	0.3
Information on commodity markets	0.2
Better credit system	0.1
More information on dairy	0.1
More information on television	0.3
Summary of university research on beef	0.1
Accurate system of weather forecasting	0.2
More veterinary information	0.2
Information on insect infestation	0.2
Information on irrigation	0.1
Information on air and water contamination	0.2
More short courses/training sessions	0.3
More staff made available	0.2



25. Are there any information services which Alberta Agriculture is currently providing that aren't needed? (2 responses allowed)

	N=2295
No	97.8%
Veterinarian branches	0.1
Suppliers provide all info. needed	0.1
Information is not helpful/not local	0.4
Bookkeeping courses	0.1
Custom rates	0.1
Stay out of policy matters	0.1
Duplication of services	0.3
Metric program	0.1
Courses are not necessary	0.2
Too much staff	0.7
AgriNews not needed	0.1
Home economists not needed	0.3
Research Station	0.1

26. Please indicate how satisfied you are with the following services offered by the Alberta Department of Agriculture. For each service please indicate if you are:

1. Very satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very dissatisfied

	N=2325					Average
	1	2	3	4	D.K.	Score
Bulletins and pamphlets offered	34.2%	54.4%	4.5%	0.8%	6.1%	1.7
Office consultations or visits	34.0	43.8	6.1	2.1	14.0	1.7
Farm Visits	19.3	33.1	9.8	5.8	32.2	2.0
Courses and Workshops offered	38.5	39.0	5.5	1.6	15.4	1.6



27. How useful would it be for you if Alberta Agriculture had computers to access farming information? (READ LIST)

N=2286

Very useful	19.8%
Somewhat useful	41.6
Not at all useful	38.6---GO TO Q. 29

28. Where should computer terminals for Alberta Agriculture information be located? (READ LIST)

N=1403

District Office	73.7%
Regional Office	16.8
Provincial Headquarters	6.4
In each town	2.9
At home	0.1
Don't know	1.9
Grain elevator	0.1
All Agriculture offices	0.5

29. On a scale of 1 to 5, with 1 being very important and 5 being not at all important, how important is it to you that the Alberta Department of Agriculture provide information to farmers in the following ways? (ROTATE STARTING POINT)

N=2325

	1	2	3	4	5	No Resp.	Average Score
Television Programs	30.0%	29.5%	21.7%	10.3%	7.2%	1.3%	2.3
Telephone contact with DA	42.4	35.0	15.2	4.5	1.9	1.0	1.9
Radio Programs	40.2	36.2	15.3	4.0	3.2	1.0	1.9
Office consultations with DA	40.4	36.5	16.2	4.2	1.6	1.1	1.9
Newspaper Articles	40.8	41.2	13.4	2.4	1.2	1.0	1.8
Newsletters	38.5	40.2	15.7	3.3	1.4	0.9	1.9
Bulletins or pamphlets	36.0	40.3	17.4	3.7	1.6	1.0	1.9
Telephone contact with agriculture specialists	37.1	35.6	17.9	5.8	2.5	1.1	2.0
Courses	38.3	36.0	18.4	3.6	2.6	1.0	2.0
Farm visits by DA	34.4	33.0	21.2	6.6	3.4	1.4	2.1
Demonstrations	37.7	37.5	17.4	4.3	1.9	1.2	1.9
Consultations with agriculture specialists							
at District Office	31.5	38.6	21.4	4.9	2.5	1.0	2.1
Farm visits by agriculture specialists	29.7	34.9	22.9	7.5	3.9	1.0	2.2

30. How could the Alberta Department of Agriculture better serve you?  
(2 responses allowed)

	N=2298
Don't know	74.2%
More research	1.7
Provide funds to young farmers	0.9
Computer access in District office	0.3
Fuel conservation	0.1
Well drilling service	0.1
Low interest loans	0.6
More soil testing	0.1
Get practical experience	1.1
Faster service	0.5
More bulletins/pamphlets	1.4
Reduce staff turnover	0.2
Increase price of products	2.0
More local information	0.3
World market information	0.7
Quarterly news bulletin	0.2
More chemical testing	0.8
Computer courses	0.3
Represent farmers on policy issues	1.1
Leave farmers alone	0.3
More field visits	5.1
Sponsor more agricultural fairs	0.1
Available after hours	0.3
Better communication by TV and radio/Advertising	1.2
Info. on chemicals	0.5
More courses in winter	2.2
Eliminate marketing boards	0.1
Toll free numbers	0.2
List of services available	0.3
More community meetings	0.3
More offices	0.2
Reduce spending	0.8
Weed control programs	0.5
Up-to-date information	2.2
Go back to Imperial system	0.3
Information on machinery prices	0.1
Information on money management	0.1
Information on hail suppression	0.1
More District Agriculturists	0.7
Information on irrigation	0.1
Reinstate the Alberta Farm Guide	0.1
Improve Veterinarian services locally	0.1

31. Which areas or issues do you feel are going to be important to farmers in the next five years? Anything else? (3 responses allowed)

N=2299

Don't know	16.4%
Alternative grain marketing procedures	0.5
Farm management	4.0
Crow Rate	24.5
Production Costs	11.3
Computers	6.7
Land management/Crop management	1.1
Water conservation	0.6
Money management	0.7
Home management	0.1
Crop research	1.5
Weed control	2.7
Irrigation	0.4
Livestock production	0.9
Financial management	2.4
Livestock marketing	0.5
Interest rates	2.4
Accurate market forecasts	2.0
Livestock prices	9.7
Crop prices	17.0
Speciality Crop research	0.4
Government policy	1.6
Chemicals/Fertilizer Cost	8.2
Marketing	15.7
Taxes	0.8
Survival/Financial Aid for young farmers	1.0
Machinery costs	5.8
Quota systems	1.2
Fuel costs	6.0
Cost/price squeeze	12.1
New technology	4.0
Go back to Imperial weights	0.3
Soil salinity	0.7
Accessibility of elevators	0.1
Erosion control	0.1

NOW I WOULD LIKE TO ASK YOU A FEW FINAL QUESTIONS FOR CLASSIFICATION PURPOSES.

32. Do you currently own a computer?

N=2325

Yes	5.1%	--GO TO QUESTION 34
No	94.3	
No response	0.6	

33. Do you intend to purchase a computer in the next 5 years?

N=2216

Yes	17.7%
No	59.8
Don't know	22.4

34. Which farm organizations, if any, do you belong to? Any others?  
(3 responses allowed)

N=2325

None	40.1%
Unifarm	15.7
United Farmers Association (UFA)	26.0
Cattlemen's Association	1.8
Southern Alberta Co-op	0.4
Alberta Wheat Pool	18.8
United Grain Growers Association	4.4
Alberta Farmers Union	0.5
National Farmers Association	3.8
Christian Farmers Association	0.8
Alberta Cow-Calf Association	0.2
Western Stock Growers	1.3
Agricultural Society	0.1
Soft Wheat Association	0.3
Vegetable Growers Association	0.2
Alberta Dairymen's Association	0.1
Sugar Beet Growers Association	0.6
Poultry Association	0.1
CANFARM	0.1
Alberta Dairy Pool	0.7
Alberta Growers Association	0.1
Agricultural Society	0.2
Alberta Women's Institute	0.1
4-H	0.3
Alberta Potato Commission	0.1
Alberta Cattle Feeder Association	0.3
Alberta Pork Producers	0.4
Canfax	0.1
Alberta Cattle Commission	0.7
Hog Marketing Board	0.3
Western Barley Growers	0.4
Alberta Goat Breeders Association	0.1
Alberta Honey Producers	0.1

35. What is the highest level of education you completed? (READ LIST)

N=2325

Less than high school	45.9%
Completed high school	28.4
Some university or technical	13.1
Completed university or technical	9.9
Post university or technical	1.6
Refused	1.2

36. How many days last year were you employed off the farm?

N=2325

None	70.8%
1-6 days (less than one week)	1.2
7-13 days (1-2 weeks)	1.4
14-20 days (2-3 weeks)	1.2
21-27 days (3-4 weeks)	0.6
28-60 days (1-2 months)	3.2
61-120 days (2-4 months)	4.9
121-180 days (4-6 months)	4.2
181-240 days (6-8 months)	3.4
241-300 days (8-10 months)	1.7
301-365 days (10-12 months)	5.7
Don't know	1.7

37. Sex (DO NOT ASK)

N=2325

Male	70.4%
Female	29.6

38. Into which age category do you fall?

N=2325

15-19	0.4%
20-24	2.7
25-29	8.5
30-34	9.3
35-39	12.1
40-44	11.7
45-49	11.9
50-54	14.1
55-59	11.6
60-64	8.0
65-69	5.0
70+	3.3
Refused	1.5

39. Into which category did your gross farm sales from agricultural production in 1982 fall? (READ LIST)

N=2325

\$2,500-\$24,999	25.2%
\$25,000-\$99,999	41.2
\$100,000-\$249,999	18.4
\$250,000 and over	5.5
Refused	9.7



APPENDIX D  
PROVINCIAL TABLES

Note:

Cross tabulation tables are to be read down and across.

EG. In the past year, have you contacted someone from  
Alberta Agriculture?

Education	Yes N=1825	No N=487
High school or less	71.0%	*84.8%
Post secondary	27.7	*14.2

The above table is read as follows: 71.0% of respondents who have contacted Alberta Agriculture in the past year have a high school education or less. When the figures in each column are totalled they will approximate 100%. This is not true when the figures in each row are totalled. Please remember, therefore, to read down first and then across in interpreting the cross tabulation tables.

All significant differences based on chi-square are indicated with an asterisk. In the above example, a relationship exists between contact with Alberta Agriculture and education. This relationship can be interpreted as follows: Respondents who have recently contacted Alberta Agriculture are more likely to have some post secondary education than those respondents who have not contacted Alberta Agriculture in the past year. Although these tables allow us to make inferences they do not indicate causality. That is, does contact with Alberta Agriculture impact on education or does education influence contact with Alberta Agriculture?

TABLE 1

Education	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Less than high school	17.1%	34.1%	58.2%	*65.8%
High school	*44.6	33.4	21.7	18.3
Post-Secondary	*37.7	32.1	19.6	13.7

TABLE 2

Gross Farm Sales	Education		
	Less than High School N=1055	High School N=660	Post-Secondary N=581
\$2,500-24,999	*28.2%	24.2%	21.2%
\$25,000-99,999	*45.6	39.5	35.6
\$100,000-249,999	*14.9	19.2	24.6
\$250,000 and over	* 4.3	5.3	9.1

TABLE 3

Gross Farm Sales	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
\$2,500-24,999	22.0%	25.1%	22.2%	*30.9%
\$25,000-99,999	36.9	40.8	42.1	*44.7
\$100,000+	*31.2	26.4	27.3	17.4

TABLE 4

Off-Farm Employment	Education		
	Less than High School N=1055	High School N=660	Post-Secondary N=581
Yes	*21.4%	31.2%	39.2%
No	*78.6	68.8	60.8

TABLE 5

Off-Farm Employment	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Yes	39.3%	38.6%	24.9%	*15.8%
No	60.7	61.4	75.1	*84.2

TABLE 6

Gross Farm Sales

	\$2,500-24,999 N=583	\$25,000-99,999 N=950	\$100,000+ N=562
Off-Farm Employment			
Yes	*47.7%	24.7%	16.9%
No	*52.3	75.3	83.1

TABLE 7

Length of Time Farming

	0-10 years N=576	10-30 years N=942	30+ years N=797
Education			
Less than high school	21.5%	44.3%	*64.4%
High school	*37.0	30.3	20.3
Post-Secondary	*40.6	24.6	14.2

TABLE 8

Length of Time Farming

	0-10 years N=576	10-30 years N=942	30+ years N=797
Off-Farm Employment			
Yes	*48.1%	29.2%	15.6%
No	51.9	70.8	*84.4

TABLE 9

Age

	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Length of Time Farming				
0-10 years	*66.4%	28.7%	10.4%	3.3%
10-30 years	29.3	*65.2	53.8	16.1
30+ years	4.3	6.1	35.8	*80.3

TABLE 10

Length of Time Farming

	0-10 years N=576	10-30 years N=942	30+ years N=797
Gross Farm Sales			
\$2,500-24,999	*32.6%	20.7%	25.1%
\$25,000-99,999	34.7	42.6	*43.7
\$100,000+	24.1	*27.7	20.3

TABLE 11

<u>Farming Enterprise</u>		N=2325
Grain (Cereal and Oilseed crops)		31.0%
Cattle (Fat Cattle/Calves or Feeders/Breeding Stock)		13.0
Mixed (Grain and Cattle)		23.9
Other (Single Enterprise)		8.0
Forage Crops (Hay)	0.7%	
Forage Seeds	0.3	
Special Crops	0.1	
Vegetable Crops	0.1	
Dairy Cattle	3.7	
Hogs	1.9	
Sheep	0.5	
Poultry	0.4	
Horses	0.1	
Alfalfa	0.1	
Honey	0.1	
Other (Multiple Enterprises)		24.2%



TABLE 12

Farming Enterprise

Education.	Grain N=720	Cattle N=302
Less than high school	43.0%	47.0%
High school	31.5	27.5
Post-Secondary	25.0	23.9

TABLE 13

Farming Enterprise

Age.	Grain N=720	Cattle N=302
15-34	20.4%	17.4%
35-44	21.8	27.2
45-54	22.4	*30.1
55+	*33.6	23.8

TABLE 14

Farming Enterprise

Gross Farm Sales.	Grain N=720	Cattle N=302
\$2500-24,999	26.8%	*35.4%
\$25,000-99,999	39.3	39.4
\$100,000-249,999	*19.7	11.9
\$250,000+	4.3	4.6

TABLE 15

Farming Enterprise

Acres of Cultivated Land Owned.	Grain N=720	Cattle N=302
Less than 240 acres	24.2%	*38.1%
240-399	16.7	21.5
400-759	28.1	23.5
760+	*28.3	12.9

TABLE 16

Acres of cultivated land owned

Acres of cultivated land rented	Less than 240 N=647	240-559 N=824	560-1119 N=528	More than 1119 N=254
Less than 240	79.1%	75.4%	69.3%	60.6%
240-559	10.7	15.7	15.0	17.7
560-1119	7.1	6.1	10.6	10.6
More than 1119	3.1	2.5	4.4	11.4

TABLE 17

Age

Acres of cultivated land owned.	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
0-239	31.2%	*32.9%	23.2%	24.1%
240-399	17.5	18.3	18.2	21.9
400-759	27.3	24.2	31.1	27.5
760+	20.0	21.2	25.4	23.8

TABLE 18

Gross Farm Sales

Acres of cultivated land owned.	\$2,500- 24,000 N=583	\$25,000- 99,999 N=950	\$100,000- 249,000 N=429	\$250,000+ N=133
0-239	*53.0%	20.0%	14.9%	15.8%
240-399	20.6	*23.4	12.8	13.5
400-759	19.0	*36.1	26.3	10.5
760+	5.8	18.8	43.4	*58.6

TABLE 19

Acres of cultivated land owned.	Education	
	High school or less N=1715	Post-Secondary N=581
0-239	26.1%	*32.0%
240-399	*20.4	15.1
400-759	*28.9	23.4
760+	21.6	26.0

TABLE 20

Acres of cultivated land owned.	Off-Farm Employment	
	No N=1642	Yes N=563
0-239	21.9%	*38.7%
240-399	19.6	20.6
400-759	29.2	26.6
760+	*25.9	16.7

TABLE 21

Acres of cultivated land owned	Length of Time Farming		
	0-10 years N=576	10-30 years N=942	30+ years N=797
0-239	*48.1%	22.4%	19.0%
240-399	16.7	20.5	19.3
400-759	21.3	28.3	*30.9
760+	10.8	25.5	*27.9

TABLE 22

Type of business arrangement	Length of time farming		
	0-10 years N=573	10-30 years N=940	30+ years N=803
Single ownership	54.5%	*65.6%	61.0%
Family partnership/corporation	*41.0	32.0	36.3
Non-family partnership/corporation	3.0	1.5	2.2

TABLE 23

Acres of cultivated land owned

Type of business arrangement.	Less than 240 N=647	240-559 N=824	560-1119 N=528	More than 1119 N=254
Single ownership	64.5%	*67.6%	58.7%	39.8%
Family partnership/corporation	31.2	30.7	39.2	*55.1
Non-family partnership/corporation	2.3	1.4	1.9	4.3

TABLE 24

Acres of cultivated land rented

Type of business arrangement.	None N=1268	Less than 240 N=412	240-559 N=324	More than 559 N=270
Single ownership	*65.6%	61.7%	56.2%	45.9%
Family partnership/corporation	31.4	35.3	42.3	*49.6
Non-family partnership/corporation	1.9	2.5	1.5	2.6

TABLE 25

Type of business arrangement

Do you intend to purchase a computer in the next 5 years?	Single ownership N=1425	Family N=827	Non-Family N=48
Yes	14.0%	21.7%	*23.9%
No	*61.1	50.9	52.4
Don't know	21.2	22.0	15.9

TABLE 26

Type of Business Arrangement	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Single Ownership	46.6%	64.8%	*66.6%	64.8%
Family partnership/ Corporation	*47.9	31.8	31.4	33.5
Non-family partnership/ Corporation	2.9	2.0	2.0	1.7

TABLE 27

Importance of information to farm operation (Average Scores)	Sex	
	Male N=1623	Female N=686
Daily market information	2.5	*2.3
Market forecasts	2.6	*2.3
Livestock production technology	3.0	2.9
Crop production technology	2.2	2.1
Agricultural chemicals	2.2	*2.0
Business management	2.2	2.1
Home management and family relationships	2.3	2.2
Government policies	2.9	*2.5

TABLE 28

Information Needs (Average Score)	Farming Enterprise	
	Grain N=720	Cattle N=302
Daily Market Information	2.4	2.5
Market Forecasts	2.4	2.5
Livestock Production Technology	3.9	2.3
Crop Production Technology	1.8	2.9
Selection and Use of Agricultural Chemicals	1.7	3.2
Business Management	2.1	2.5
Home Management and Family Relationships	2.2	2.5
Government Policies	2.7	3.0



TABLE 29

What is the best source of information on home management and family relationships?	Male N=1623	Female N=687
Radio	2.6%	2.3%
Television	1.8	1.9
Alberta Agriculture	2.0	1.2
Personal experience	21.0	20.7
Farm magazines	9.4	11.4
Newspapers	10.2	7.9
Neighbors and friends	6.7	5.1
District Agriculturist	3.8	4.7
District Home Economist	6.3	*13.1
Don't know	*27.4	21.5
Church	5.1	5.2
Other	3.7	5.0

TABLE 30

Farming Enterprise

Best Source of Information.	Grain N=720	Cattle N=302
<hr/>		
DAILY MARKET INFORMATION		
Radio	74.9%	75.5%
MARKET FORECASTS		
Radio	*48.1%	38.1%
Newspapers	14.7	14.6
Farm Magazines	10.0	*16.6
Don't know	8.0	12.3
LIVESTOCK PRODUCTION TECHNOLOGY		
Farm Magazines	13.5%	*29.5%
Newspapers	8.6	*14.6
District Agriculturist	4.9	9.6
Don't know	*53.5	13.6
CROP PRODUCTION TECHNOLOGY		
Farm Magazines	22.4%	19.2%
Newspapers	19.2	15.6
District Agriculturist	14.9	15.6
Don't know	5.6	*22.8
SELECTION AND USE OF AGRICULTURAL CHEMICALS		
Suppliers/Dealers	20.0%	15.6%
Farm Magazines	11.1	14.6
District Agriculturist	12.9	14.9
Elevator Agents	*19.3	12.3
Don't know	3.3	*18.5
BUSINESS MANAGEMENT INFORMATION		
Personal Experience	16.1%	13.9%
Bankers	14.2	15.6
District Agriculturist	8.5	10.3
Don't know	18.1	21.9
INFORMATION ON GOVERNMENT POLICY		
Radio	16.4%	12.3%
Farm Magazines	5.3	*10.3
Newspapers	23.6	17.9
District Agriculturist	8.8	11.3
Don't know	18.2	21.5
HOME MANAGEMENT AND FAMILY RELATIONSHIPS		
Personal Experience	17.6%	19.2%
Farm Magazines	9.9	11.9
Newspapers	9.6	8.3
District Home Economist	7.1	7.9
Don't know	29.0	30.8

TABLE 31

What's the first thing that comes to mind when I say Alberta Department of Agriculture?	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Research Station	6.5%	4.8%	5.9%	3.1%
District Agriculturist	*32.4	31.4	31.4	24.1
Don't know	6.3	11.0	10.7	*13.2
Farming Information	26.7	27.8	30.1	*35.1
Governments/Bureaucrats	4.5	4.1	5.7	5.1

TABLE 32

What's the first thing that comes to mind when I say Alberta Department of Agriculture?	Acres of cultivated land owned			
	0-239 N=648	240-399 N=443	400-759 N=636	760+ N=525
Research station	5.1%	6.1%	4.1%	5.1%
District Agriculturist	25.3	27.5	32.4	*33.7
Don't know	12.0	10.6	9.0	9.7
Farming Information	30.1	29.1	*33.3	26.3
Governments/Bureaucrats	4.5	5.6	4.9	4.4

TABLE 33

What's the first thing that comes to mind when I say Alberta Department of Agriculture?	In the past year, have you contacted someone from Alberta Agriculture?	
	Yes N=1859	No N=466
Research Station	4.6%	6.4%
District Agriculturist	*32.2	17.8
Don't know	8.8	*18.0
Farming Information	29.4	33.0
Government/Bureaucrats	4.5	6.7

TABLE 34

What is the first thing that comes to mind when I say Alberta Department of Agriculture?	Gross Farm Sales		
	\$2,500-24,999 N=583	\$25,000-99,999 N=950	\$100,000+ N=562
Research Station	3.8%	5.5%	5.7%
District Agriculturist	23.8	31.1	*34.3
Don't know	11.5	9.9	8.2
Farming information	*37.2	29.7	29.3
Government/Bureaucrats	4.3	4.3	5.2

TABLE 35

	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Contact with Alberta Agriculture				
District Office	78.0%	*78.3%	77.3%	65.7%
Regional Office	*21.6	20.1	20.1	14.8
Provincial Headquarters Offices	8.6	7.4	8.5	6.1

TABLE 36

Gross Farm Sales

	\$2,500-24,999 N=583	\$25,000-99,999 N=950	\$100,000+ N=562
Contact with Alberta Agriculture			
District Office	66.7%	75.3%	*82.9%
Regional Office	13.6	17.8	*26.5
Provincial Headquarters Offices	5.1	6.5	*12.1

TABLE 37

Education

	Less than high school N=1055	High School N=660	Post-Secondary N=581
Contact with Alberta Agriculture			
District Office	68.7%	74.1%	*84.5%
Regional Office	14.8	19.1	*26.5
Provincial Headquarters Offices	6.0	6.8	*11.4

TABLE 38

Acres of cultivated land owned.

	0-239 N=648	240-399 N=443	400-759 N=636	760+ N=525
Contact with Alberta Agriculture.				
District Office	68.1%	72.5%	*76.9%	*79.2%
Regional Office	16.8	19.9	18.4	21.5
Provincial Headquarters Offices	7.4	7.2	8.0	8.0

TABLE 39

Farming Enterprise

	Grain N=720	Cattle N=302
Contact with Alberta Agriculture.		
District Office	71.2%	73.8%
Regional Office	16.0	15.2
Provincial Headquarters Offices	5.4	7.0

TABLE 40

In the past year, have you contacted someone from Alberta Agriculture?	Age			
	15-34 N=491	35-44 N=557	45-54 N=598	55+ N=644
Yes	*84.5%	81.3%	83.4%	72.0%
No	15.5	18.7	16.6	*28.0

TABLE 41

In the past year, have you contacted someone from Alberta Agriculture?	Gross Farm Sales			
	\$2,500- 24,999 N=583	\$25,000- 99,999 N=950	\$100,000- 249,000 N=429	\$250,000+ N=133
Yes	73.1%	80.0%	*89.3%	82.7%
No	*26.9	20.0	10.7	17.3

TABLE 42

In the past year, have you contacted someone from Alberta Agriculture?	Length of time farming		
	0-10 years N=576	11-30 years N=942	30+ years N=797
Yes	*83.2%	82.9%	74.0%
No	16.8	17.1	*26.0

TABLE 43

Contact with Alberta Agriculture	Education		
	Less than High School N=1055	High School N=660	Post-Secondary N=581
Yes	75.9%	78.6%	*88.6%
No	*24.1	21.4	11.4



TABLE 44

Under what circumstances would you contact Alberta Agriculture?

N=466

Plant or Animal Disease	8.2%
Chemical Information	9.2
Market Forecasts	0.4
New Crops	1.3
Weed Control	19.5
Insect Control	4.5
Soil Testing	3.4
Metric Conversion	0.4
Hail Insurance	0.4
Irrigation	1.1
Other	0.8

TABLE 45

Do you think the district office should.....	How long have you been farming?		
	0-10 years N=411	10-30 years N=687	30+ years N=526
Be open on weekends			
Yes	13.6%	10.2%	10.1%
No	86.4	89.8	89.9
Be open in the evenings			
Yes	13.4%	10.3%	10.1%
No	86.6	89.7	89.9

TABLE 46

Do you think the district office should.....	Sex	
	Male N=1136	Female N=484
Be open on weekends		
Yes	11.1%	10.7%
No	88.9	89.3
Be open in the evenings		
Yes	10.7%	11.8%
No	89.3	88.2

TABLE 47

Satisfaction with bulletins and pamphlets offered by the Alberta Department of Agriculture.	Contact with district office	
	Yes N=1721	No N=578
Very satisfied	*37.3%	25.9%
Somewhat satisfied	55.7	51.9
Dissatisfied	4.8	6.9
Don't know	2.2	*15.3

TABLE 48

Satisfaction with office consultations or visits.	Contact with district office	
	Yes N=1721	No N=578
Very satisfied	*40.2%	16.7%
Somewhat satisfied	*46.4	37.5
Dissatisfied	7.2	11.0
Don't know	5.8	*34.2

TABLE 49

Satisfaction with farm visits.	Contact with district office	
	Yes N=1721	No N=578
Very satisfied	*22.3%	10.7%
Somewhat satisfied	*36.7	22.8
Dissatisfied	15.8	15.1
Don't know	24.6	*50.6

TABLE 50

Satisfaction with courses and workshops offered.	Contact with district office	
	Yes N=1721	No N=578
Very satisfied	*43.1%	26.4%
Somewhat satisfied	40.5	35.6
Dissatisfied	7.2	6.9
Don't know	9.0	*30.7

TABLE 51

Satisfaction with bulletins and pamphlets offered by the Alberta Department of Agriculture.	Contact with regional office	
	Yes N=434	No N=1864
Very satisfied	*41.3%	32.9%
Somewhat satisfied	51.2	55.6
Dissatisfied	6.1	5.2
Don't know	1.5	* 6.0

TABLE 52

Satisfaction with office consultations or visits.	Contact with regional office	
	Yes N=434	No N=1864
Very satisfied	*40.9%	32.8%
Somewhat satisfied	45.6	43.8
Dissatisfied	8.7	8.0
Don't know	4.4	*15.1

TABLE 53

Satisfaction with farm visits.	Contact with regional office	
	Yes N=434	No N=1864
Very satisfied	*23.5%	18.5%
Somewhat satisfied	36.2	32.6
Dissatisfied	18.8	15.0
Don't know	21.3	*33.5

TABLE 54

Satisfaction with courses and workshops offered.	Contact with regional office	
	Yes N=434	No N=1864
Very satisfied	*44.7%	37.5%
Somewhat satisfied	36.6	39.9
Dissatisfied	*11.2	6.2
Don't know	7.5	*16.2

TABLE 55

Contact with Provincial Headquarters Offices

Satisfaction with bulletins and pamphlets offered by the Alberta Department of Agriculture.	Yes N=175	No N=2118
Very satisfied	40.3%	34.0%
Somewhat satisfied	49.4	55.2
Dissatisfied	8.8	5.1
Don't know	1.6	5.6

TABLE 56

Contact with Provincial Headquarters Offices

Satisfaction with office consultations or visits.	Yes N=175	No N=2118
Very satisfied	*46.9%	33.1%
Somewhat satisfied	38.4	44.6
Dissatisfied	10.5	8.1
Don't know	4.2	*13.9

TABLE 57

Contact with Provincial Headquarters Offices

Satisfaction with farm visits.	Yes N=175	No N=2118
Very satisfied	26.0%	18.8%
Somewhat satisfied	32.9	33.3
Dissatisfied	19.6	15.4
Don't know	20.9	*32.1

TABLE 58

Contact with Provincial Headquarters Offices

Satisfaction with courses and workshops offered.	Yes N=175	No N=2118
Very satisfied	*59.2%	37.1%
Somewhat satisfied	29.9	*40.0
Dissatisfied	6.6	7.3
Don't know	4.3	*15.5



TABLE 59

How useful would it be if Alberta Agriculture had computers to access farming information?	Length of Time Farming		
	0-10 years N=568	10-30 years N=932	30+ years N=782
Very useful	*28.0%	20.3%	13.9%
Somewhat useful	41.2	*45.1	36.7
Not at all useful	30.8	34.7	*49.4

TABLE 60

How useful would it be if Alberta Agriculture had computers to access farming information?	Do you currently own a computer?	
	Yes N=118	No N=2160
Very useful	*44.9%	18.6%
Somewhat useful	42.4	41.1
Not at all useful	12.7	*40.3

TABLE 61

How useful would it be if Alberta Agriculture had computers to access farming information?	Do you intend to purchase a computer in the next 5 years?		
	Yes N=394	No N=1296	Don't know N=493
Very useful	*48.7%	8.3%	22.5%
Somewhat useful	40.9	36.2	*54.8
Not at all useful	10.4	*55.5	22.7

TABLE 62

How useful would it be if Alberta Agriculture had computers to access farming information?	Education		
	Less than High School N=1037	High School N=651	Post-Secondary N=576
Very useful	14.0%	23.0%	*27.6%
Somewhat useful	40.5	43.6	40.1
Not at all useful	*45.5	33.3	32.3

TABLE 63

How useful would it be if Alberta Agriculture had computers to access farming information?	Age			
	15-34 N=485	35-44 N=552	45-54 N=586	55+ N=635
Very useful	*29.5%	22.6%	19.6%	11.2%
Somewhat useful	*47.0	45.3	38.9	35.7
Not at all useful	23.5	32.1	41.5	*53.1

Note: Because of its significance to Alberta Agriculture's proposed AAPAC development, further analysis will be done on the above table and the questions (Q. 32 & Q. 33) dealing with current ownership and intent to purchase a computer.

TABLE 64

How useful would it be if Alberta Agriculture had computers to access farming information?	Gross Farm Sales		
	\$2,500-24,999 N=574	\$25,000-99,999 N=941	\$100,000+ N=555
Very useful	16.6%	18.4%	*26.8%
Somewhat useful	35.9	44.2	*45.6
Not at all useful	*47.6	37.4	27.6







N.L.C. - B.N.C.



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